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## **Case Study:**

### **Bank of Cyprus' Bad Debt: Too Big to Manage?**

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## **Abstract**

“Back from the dead” is how international media today describes the Bank of Cyprus after its resolution. Although market perception and financial results are improving considerably, there is still a “nightmare haunting” BoC’s credibility and performance: the big scale of Non-Performing Loans. The case narrative describes all the important facts during and after the turbulent crisis period as well as the actions of BoC’s CEO to overcome the bad debt problem and the hypothesis of the creation of a “bad bank”. The teaching notes analyze the impact of NPLs’ problem and the options presented at the end of the case.

**Keywords:** Bank of Cyprus; Bankruptcy; John Hourican; Non-Performing Loans; “bad bank”

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## 1. Introduction

On October 22<sup>nd</sup>, 2013, Mr. Hourican faced his career's challenge by becoming the new chief executive officer at Bank of Cyprus (BoC)<sup>1</sup>, which was going through a huge financial crisis at the time. In his words: it was "The opportunity to make a real difference not only for the bank but for the country as a whole is a significantly interesting challenge."<sup>2</sup>

In March 2013, Cyprus' banking system crashed, capital controls were imposed, banks were closed for two weeks, new laws were released enabling the split between the good and bad parts of the bank, and for the first time in the history of Cyprus, banks were recapitalized through a bail-in of uninsured deposits (see **Exhibit 1** for a descriptive of bail-in amounts). Additionally, the two biggest banks in Cyprus – Bank of Cyprus and the Cyprus Popular Bank (also known as Laiki Bank) – limited the amount of money that the clients could withdraw daily or use in credit transactions. However, after asking to the Eurogroup, European Commission, European Central Bank, and International Monetary Fund for a rescue package of €10 billion, the Cypriot government had to close its second largest bank – the Laiki Bank.<sup>3 4</sup>

As one of the island's largest financial institutions, the Bank of Cyprus suffered severely with the Cypriot financial crisis and consequently had to come up with heavy measures in order to restructure itself. Furthermore, the bank had announced a record volume of Non-Performing Loans (NPLs) of €14 billion in 2013. After the bailout agreement, John Hourican is now the one responsible for managing the bank during this turbulent transition. But how would he recover the confidence of key stakeholders? How can he get rid of the NPLs problem?

## 2. Banking system in Cyprus

After Cyprus' Independence, the banking system of the country has grown a lot due to the fast expansion of the island (see **Exhibits 2 and 3** for more information), the stiff competition among banks and the creation of the Central

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<sup>1</sup> Saigol, Lina. October 23<sup>rd</sup> 2013. "Hourican Faces Challenging Role at Bank of Cyprus". Financial Times. <https://www.ft.com/content/4caaa494-3bd2-11e3-b85f-00144feab7de>

<sup>2</sup> Schäfer, Daniel. October 22<sup>nd</sup> 2013. "Hourican to lead Bank of Cyprus." Financial Times. < <https://www.ft.com/content/5fc4360e-3b59-11e3-87fa-00144feab7de>>

<sup>3</sup> Clerides, S. 2014. "The Collapse of the Cypriot Banking System: A Bird's Eye View". *Cyprus Economic Policy Review*, 8(2), 3–35.

<sup>4</sup> Orphanides, A. 2014. "What Happened in Cyprus? The Economic Consequences of the Last Communist Government in Europe". Retrieved from <http://ssrn.com/abstract=2432456>



Bank of Cyprus. Banks went beyond the traditional retailing system by extending their activity to international trade finance, foreign currency accounts and other non-banking activities such as insurance or security investments.<sup>5</sup>

Outstanding most of countries in Europe, Cyprus has become highly attractive to foreign investors, with assets representing more than 600% of Cyprus' GDP in 2011-2013 (see **Exhibit 4** for more key information about banking sector of Cyprus) creating in the long-term an unsustainable situation. <sup>6</sup>Along with Luxembourg, Malta, Ireland, Great Britain, Denmark, France, and the Netherlands, Cyprus presented a proportion of assets to the GDP well above the European Union's average of 370%.<sup>7</sup>

In a general picture, the banking system was characterized by 5 main aspects.<sup>6</sup> Most of the banks and financial institutions were detained by private investors. The commercial banking industry was considerably concentrated because of the size of small (in absolute terms) banks as a proportion of GDP. Regarding the top three banks of the island (Bank of Cyprus, Cyprus Popular Bank, and Hellenic Bank), all together they controlled 56% of the domestic deposits and 48% of domestic loans in March 2011. The same industry was highly profitable, when compared to similar banks in other European countries. The banking sector was highly saturated as it is shown in **Exhibit 5**, in a population of 577 000 habitants, there were 1297 inhabitants per branch.<sup>8</sup> This fact did not allow the banks to expand themselves locally. For that reason, the three biggest banks of the island expanded their operations into Greece and to other global markets. Finally, there was substantial conduct regulation<sup>9</sup> as the interest rates were not market determined and were subject to a percentage ceiling<sup>10</sup>. In Cyprus, the credit ceilings were imposed from time to time, and reserve requirements varied between 20 and 25 percent. Due to the financial stability and growth in the Cypriot economy, experienced before 2001, banks did not feel the need to invest in risk management and project appraisal becoming vulnerable to movements in global markets. <sup>11</sup>

<sup>5</sup> **Phylaktis, Kate.** 1995. "The Banking System during Independence". In *Banking System of Cyprus: Past, Present and Future*. Macmillan Press Ltd. : 76-83

<sup>6</sup> Central Bank of Cyprus

<sup>7</sup> European Banking Federation, 2012

<sup>8</sup> "Cyprus | Data." 2011-2013. World Bank Data. <<http://data.worldbank.org/country/cyprus>>

<sup>9</sup> It implies "direct restrictions on assets and liabilities (including prudential rules and rules on participation in non-banking firms), rules relating to fees and commissions and interest rates on assets and liabilities. These regulations are expected to provide banks with an incentive to over-emphasize competitive rules which are not restricted." (**Fulbright, Norton Rose.** 2014. "Beyond law: understanding the scope of conduct regulation)

<sup>10</sup> The maximum interest rate that reduces the risk of a party not paying the interest and that might be charged on a contract. (Ceiling." *The Free Dictionary*. Farlex, n.d. . <http://financial-dictionary.thefreedictionary.com/ceiling>)

<sup>11</sup> **Phylaktis, Kate.** 1995. "The Banking System during Independence". In *Banking System of Cyprus: Past, Present and Future*. Macmillan Press Ltd. : 83-84

Banks established a significant subsidiary network leading to an over-banked, costly and inefficient system. Most of the foreign banks were not able and did not desire to work in this inconsistent and vulnerable banking system, and for that reason, the majority left Cyprus in the 1980s.<sup>10</sup> When the financial crisis hit Cyprus, the banks suffered the negatively impact and were unable to defend themselves. Consequently, and for the first time in the history of Cyprus, the depositors had to pay for the country's restructuring plan. The cuts reached a record scale which transformed the Cypriot economy completely.<sup>12</sup>

### *Central Bank of Cyprus*

Formed in June of 1963, the Central Bank of Cyprus (CBC) came to support the financial development of Cyprus' economy. To control the Cypriot monetary and banking system, the central bank was responsible for the bank supervision; regulation of money and credit supply; the management of the Republic's international reserves and it was the official banker and financial agent that represented the government of Cyprus. Preceding the crisis, the CBC's reputation was quite good regarding its effectiveness and actions, free of political interference. By the time that crisis started to reveal its consequences, the CBC was getting more and more exposed. The Central Bank was accused of acting late and being confident when credit and property bubble affected the banking system. When the global crisis impacted the world economies brutally, the Central Bank decreased the constraints less than a year later.<sup>13</sup>

Day after day, critics and concerns were raised, from local and global media as well as other international and local institutions, around the CBC's inefficiencies and ethical problems. The detention of Greek government bonds (GGBs) was highly criticized, as the CBC and the Governor Orphanides did not try to stop the Cypriot banks from accumulating them. Even though banks did not have to ask for permission to acquire bonds, CBC should have requested for the gradually and discretely decrease of the exposure to Greek government bonds (see **Exhibit 6**) by the two major banks (Bank of Cyprus and Cyprus Popular Bank). In addition, the Central Bank of Cyprus permitted banks to not classify loans as non-performing if they were appropriately collateralized.<sup>14</sup>

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<sup>12</sup> Ibid

<sup>13</sup> Ibid

<sup>14</sup> **Clerides, S.** 2014. "The Collapse of the Cypriot Banking System: A Bird's Eye View". *Cyprus Economic Policy Review*, 8(2), 3–35.

Last but definitely not least, the Central Bank's actions towards the two biggest banks on the island were the most controversial issue during the crisis. In one hand, the CBC did not oppose itself to the renewal of Bank of Cyprus' Board where one of the biggest debtors of the bank became its chairman exactly when the real estate bubble was in full swing. Given the ideal standards of corporate governance, this inaction of the CBC was incomprehensible. On the other hand, the CBC provided Emergency Liquidity Assistance (ELA) to the Cyprus Popular Bank which was already insolvent by the end of 2012. This measure was a strong violation of the European Central Bank's rules which, when considered not solvent, prohibited financial institutions from receiving the ELA.<sup>15</sup>

Adding to these issues, the inaction in multiple M&A operations performed by the Bank of Cyprus and the Laiki Bank, damaged the image of the CBC severely. All the inertia and errors of the CBC contributed or did not minimize the effects of the crisis. There were indeed some analysts that defended that the CBC was a sick institution and the treatment would not be quick.<sup>16</sup>

### 3. Bank of Cyprus and John Hourican

The Bank of Cyprus is headquartered in Nicosia, and it is the major financial institution in Cyprus. The banking group, which is supervised and regulated by the Central Bank of Cyprus, provides a wide range of financial products and services, mainly finance, investment banking, brokerage, fund management, retail and commercial banking. Founded in 1899, the Nicosia Savings Bank changed its name to Bank of Cyprus by the time it went public in 1912. In 1991, the bank opened the first subsidiary in Greece. By 2011, it had a notorious presence in Russia and Greece, much stronger than in Cyprus.<sup>1718</sup>

For unfortunate reasons, this Cypriot bank was known for its recapitalization through a bail-in of uninsured deposits. Furthermore, it gained the vigorous assets of Laiki bank (Popular Bank) which was forced to shut down as a requirement of the International Monetary Fund and the European Union in order to provide a rescue for Cyprus. The second largest bank in Cyprus (Laiki Bank), was divided into two parts, the positive one that was merged into BoC and the negative one that includes, for example, old shares, uninsured deposits or bonds was kept within the

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<sup>15</sup> Ibid

<sup>16</sup> Ibid

<sup>17</sup> "Milestones from Our History." Welcome - Bank of Cyprus Group. <<http://www.bankofcyprus.com/en-GB/who-we-are/boc-at-a-glance/milestones-from-our-history/>>.

<sup>18</sup> "Bank of Cyprus." Wikipedia. Wikimedia Foundation.

<[https://en.wikipedia.org/wiki/Bank\\_of\\_Cyprus#Deposits\\_tax\\_and\\_bailout\\_or\\_bailin](https://en.wikipedia.org/wiki/Bank_of_Cyprus#Deposits_tax_and_bailout_or_bailin)>

bankrupted bank. Although the uninsured depositors turned to be the bigger stockholders of BoC with 81% of holding, they did not have the right to a seat on the board. Similarly to the Bank of Cyprus, the Laiki bank financed a lot of Greek companies before and during the financial crisis of 2012-2013.

In 2012, the financial crisis of Greece and Cyprus obligated the BoC to cease the branches in Greece (See **Exhibit 7**) and in March 2013, the board of directors and the CEO were replaced. Simultaneously, the former leader of the Royal Bank of Scotland, the Irish banker John Patrick Hourican, was nominated Chief Executive Officer of the Bank of Cyprus. His role implied a three to a five-year restructuring plan for the Bank (see **Exhibit 8** for the professional profile of BoC's CEO).

#### 4. Main risks of the bank of Cyprus

It is a fact that the risk management practices within the banking system before the collapse of the Cypriot economy were not enough due to the stability and expansion of the banking industry. Nonetheless, the banks faced many types of risks, in the course of their operations, that can impact their business negatively, and the Bank of Cyprus (BoC) is not an exception. To protect itself from those risks, the Group had to hold regulatory capital against three main types of risks (accordingly to the Basel II regulation): the market risk, the credit risk, and the operational risk (including litigation risk) – (see **Exhibit 9** for risk governance structure information).<sup>19</sup>

##### *Market risk*

From all the risks included within the market risk, the liquidity risk is undoubtedly the one that most affected the banks in Cyprus between 2012-2013. The liquidity risk is the hazard due to which the Group cannot entirely or instantly meet present and future installment commitments as and when they fall due. It therefore incorporates the likelihood that the Group may need to raise money at a higher cost or sell assets at discount. The minimum liquidity ratios – computed as the liquid assets to total deposits - established by the Central Bank of Cyprus were 20% for the Euro and 70% for foreign currencies. In 2012-2013, the Bank of Cyprus' liquidity ratios (see **Exhibit 10**) were very well below the minimums established due to accelerating economic crisis that affected Cyprus, Greece and other euro zone countries that provoked the decrease of the bond values, the outflow of the clients' deposits and the bail-in.

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<sup>19</sup>Bank of Cyprus Annual Financial Report 2013.

### *Credit Risk*

Following the restructure and recapitalization of the Bank of Cyprus, the Group applied stricter lending criteria and reduced the approval limits of various credit authorities considerably (see in **Exhibits 11** and **12** credit exposure and quality of loans between 2012-2013). The Banking Law in Cyprus and the applicable directives of the Central Bank of Cyprus had imposed limitations to loan concentrations. For example, banks were not allowed to own loans over 25% of the shareholders' value to a single client assemble. However, the Bank of Cyprus did not comply with this regulation on December 31<sup>st</sup>, 2012.<sup>20</sup>

### *Operational Risk*

The historical deterioration of the Cypriot economy, political instability and the regulatory measures negatively impacted the bank's operations and business which offered many challenges to operational risk management. The year of 2013 was particularly challenging regarding operational risks. After the celebration of an agreement in March 2013 between the Eurogroup and the local government, IT-related operational hazards rose. This was due to the complexity and tight deadlines confronted with the emerging, timely and effective need of applying IT systems related to the Decrees issued by the Resolution Authority for the safeguard of bail-in of deposits and capital controls. Furthermore, the bank faced several operational issues daily due to the assimilation of the Laiki Bank's operations.<sup>21</sup>

## **5. Consequences to BoC and effects on stakeholders**

When the crisis hit the Cypriot economy, banks assumed their losses and failed massively. This situation caused a bank run and the establishment of capital controls, which was a violation of the principles on which the foundation of the Euro was based. As a result, the biggest lender on the island – the Bank of Cyprus – was in a delicate and monumental situation (see **Exhibits 13, 14** and **15**)

The ongoing severe global recession, especially in Greece, led to impairment losses on loans and advances on Greek government bonds (see **Exhibit 16** for more information about Greek government bonds' impairments), also increasing the provisions of the same elements. In addition, as the Cypriot economic situation deteriorated, the

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<sup>20</sup> Ibid

<sup>21</sup> Ibid

deposit's outflows were constant up until March 2013 (see **Exhibit 17**). The Eurosystem funding was only obtained in 2013. As the credit rating downgraded, the access to liquidity provided by other financial institutions was becoming difficult, and the bank relied heavily on the liquidity given by the European Central Bank and the Central Bank of Cyprus.<sup>22</sup>

Subsequently to the bailout agreement with Troika, the Republic of Cyprus had to follow the agreed terms. Firstly, the Bank of Cyprus, as well as the Cyprus Popular Bank, were recapitalized through uninsured deposits. This factor completely mined the credibility of the banks and reduced credit availability. Secondly, with the order of closing the second largest lender in Cyprus (Cyprus Popular Bank), its operations were transferred to the Bank of Cyprus which increased the complexity and number of difficulties confronted by the BoC.

The accumulation of bank deficiencies allied to the deep recession in Cyprus affected the profitability of the bank inevitably (see **Exhibits 18, 19, 20, 21** and **22** for the financial statements of the bank in 2012-2014). During this period, the growth of the bank was constrained as it was forced to deleverage and support the taxes as well as other fiscal austerity measures. Additionally, the private sector's activity slowed down significantly. By 31<sup>st</sup> December of 2012, the BoC was not able to meet the minimum capital adequacy ratio imposed by the European institutions and presented a Tier 1 Capital ratio at 0.6% and negative Core Tier 1 capital ratio at -1.9% (see **Exhibit 17**).<sup>23</sup>

BoC faced an aggregation of no leadership, a quarreling board, frightful results and loss of public confidence. In the interval of 2012-2013, the bank was at its most critical point, and it was said that BoC was on automatic pilot with no one taking charge or responsibility.<sup>24</sup>

Inescapably all the BOC stakeholders were deeply affected, however, as revealed by the present CEO, John Hourican, three elements were deepened and some irreversibly affected by the banking system reform : "I would like to close by acknowledging how difficult the past year has been for our employees, our customers, and our shareholders. No one would have set out to create these conditions deliberately, and I ask for your support and

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<sup>22</sup> Bank of Cyprus Annual Financial Report 2013.

<sup>23</sup> Ibid

<sup>24</sup> Cyprus Mail. November 3<sup>rd</sup>, 2016. "Our View: Public Desperately Needs Strong Leadership at BoC." Cyprus Mail. <<http://cyprus-mail.com/2013/10/15/our-view-public-desperately-needs-strong-leadership-at-boc/>>.

encouragement for our plans to restore this Group back to health and, in time, value.” John Hourican<sup>25</sup>

### *Employees*

With the necessary bank restructure, a number of branches in international and national territory were closed. Consequently, there were salary and staff reductions as well as the implementation of a voluntary retirement scheme (see **Exhibit 23** for more detailed information). In the end, the salaries were cut by 30 percent, the staff costs reduced by approximately 34 percent, and around 24% of the employees were fired.<sup>26</sup> Those who took the scheme did not have access to the bank accounts in which their funds were being kept. A significant amount of the voluntary funds was turned into shares, and the remaining amount was held in BoC accounts which were restricted to capital controls imposed.<sup>27</sup>

“We feel like we were psychologically blackmailed into leaving our jobs and on top of that we were deceived by the unions into thinking that our provident funds would not be touched,” said Panayiotis Parperis, 58, who worked at the BoC for 32 years.<sup>28</sup>

### *Customers*

Generally, the clients of BoC were segmented into Consumer Banking, Small and Medium Enterprises Banking and Corporate Banking in Cyprus (**Exhibit 24**). These segments were applied to all services including loans across Cyprus, Greece, Romania, United Kingdom and Russia. All sectors were profoundly affected by the troubling Bank situation, and depositors were unprecedentedly harmed like no other, nor in other places or banking systems in the world.

For a long time, people were told by Cypriot official authorities and by the European Union, that the haircut would never take place. When this threat became a reality, the foundation of banking and the customers’ confidence was lost overnight. The Cypriot government seized 47.5 percent of uninsured deposits (over 100 000€) to recapitalize

<sup>25</sup> Hourican, J. . November 29<sup>th</sup>, 2013. “Bank of Cyprus Group: Annual General Meeting”. Retrieved from Bank of Cyprus: [www.bankofcyprus.com](http://www.bankofcyprus.com)

<sup>26</sup> Bank of Cyprus Annual Financial Report 2013.

<sup>27</sup> **Psyllides, George**. July 8<sup>th</sup>, 2013. "BoC Retirement Scheme Comes into Force." Cyprus Mail. <<http://cyprus-mail.com/2013/07/08/boc-retirement-scheme-comes-into-force/>>.

<sup>28</sup> **Press, Menelaos Hadjicostis Associated**. July 29<sup>th</sup>, 2013. "Bank of Cyprus Depositors Lose 47.5% of Savings." USA Today. Gannett Satellite Information Network. <<https://www.usatoday.com/story/money/business/2013/07/29/bank-of-cyprus-depositors-lose-savings/2595837/>>.



banks. Those clients have received equity in return, as they were not able to take their money out of the Bank of Cyprus given the strict rules imposed by Troika. One share was given for each €1 of deposits. Nonetheless, after relisting, the BoC's shares were worth €0.24 which was only 0.6 times the bank's book value.<sup>29</sup> The depositors did not only see their savings being wiped out but they were obliged to hold debts based on their savings and convertible bonds. Depositors that detained €100 000 in the Bank of Cyprus got shares in exchange for at least 37.5% of their uninsured deposits, and 22.5% more were inserted into a special fund with no interest, and that could see write-offs additionally.<sup>30</sup>

With the crisis strengthening, a great deal of clients was failing to pay their loans which intensified the liquidity needs of the bank and provoked a significant reduction in lending. Furthermore, credit card transactions were limited to €5 000 a month; withdrawals were limited to €300 per day and travelers could only withdraw €1 000 in bank notes abroad. "You have many cases of companies that maybe could do things, but they cannot get credit." Said Stavros Zenios, a nonexecutive member of the board of directors of the Central Bank of Cyprus.<sup>31</sup>

### *Shareholders*

Older shareholders paid a disproportional price for the Cyprus' bail-in once they lost a generous amount of money either through the deposits haircut and the inexistence of dividend, as the shares were diluted during the bail-in. Even so, the old shareholders incurred in a loss of 98.7% due to the reduction of share price from €12 to €0.20 from 2007 to 2012.<sup>32</sup>

Throughout the time when the deposits suffered the haircut, depositors held 81% of the share capital of BoC which combined with the debt securities converted into ordinary shares represented less than 1% of the share capital of the bank. The old shareholders lost control with the creditors of the bank now framing the new shareholder base.<sup>33</sup>

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<sup>29</sup> **Martin, Arnold.** December 15<sup>th</sup>, 2014. "Bank of Cyprus Shares to Resume Trading." Financial Times. <<https://www.ft.com/content/60320adc-847b-11e4-ba4f-00144feabdc0>>.

<sup>30</sup> **Stothard, Michael.** March 30<sup>th</sup>, 2013. "Bank of Cyprus Haircut Could Be as Much as 60% - CNN.com." CNN. Cable News Network. <<http://edition.cnn.com/2013/03/30/business/cyprus-haircut-ft/>>.

<sup>31</sup> **Ewing, Jack.** March 16<sup>th</sup>, 2015. "As Cyprus Recovers From Banking Crisis, Deep Scars Remain." The New York Times. The New York Times. <[https://www.nytimes.com/2015/03/17/business/international/as-cyprus-recovers-from-banking-crisis-deep-scars-remain.html?\\_r=0](https://www.nytimes.com/2015/03/17/business/international/as-cyprus-recovers-from-banking-crisis-deep-scars-remain.html?_r=0)>.

<sup>32</sup> **Cyprus Mail.** November 11<sup>th</sup>, 2013. "BoC Shareholders Have Suffered Enough." Cyprus Mail. <<http://cyprus-mail.com/2013/08/17/boc-shareholders-have-suffered-enough/>>.

<sup>33</sup> Bank of Cyprus Annual Financial Report 2013.



As expected, protests, conflicts, and legal actions came in a hurry. Irini Karamanou, a former non-executive member of the bank's board, raised her voice and contested next to the Supreme Court against the decision for the sale of the operations in Greece and the transference of Cyprus Popular Bank's emergency liquidity. The accuser defended that the appointment of a temporary administrator for BoC was illegal as the bank was not bankrupt nor insolvent at that time. Therefore, all the decisions made at that moment were considered by Karamanou illegal.<sup>34</sup>

## 6. New BoC?

In order to overcome the gigantic crisis faced in 2012-2013, to rebuild the trust in the bank and support the Cypriot economy, BoC created a restructuring and recapitalization plan following the decision of Eurogroup. Consequently, BoC was able to solidify its position, strengthen its capital position, minimize the exposure to the Greek economy, have access to European Central Bank liquidity and remain privately owned.<sup>35</sup>

### *Restructuring*

By 2013, the restructuring costs totaled €21 million, €11 million related to the voluntary retirement scheme in Greece and €10 million relating to the preparation of the restructuring plan and the stress test exercise carried out by the Central Bank of Cyprus.<sup>36</sup>

The restructuring plan (see **Exhibit 25**) was considered "the bible" of how BoC must operate in the next five years however other major problems needed to be addressed and solved. This plan aimed to enable BoC to overcome its biggest problems and gradually normalize its performance. A specific medium and long-term targets, such as the compliance with the minimum capital adequacy requirements, were set by the Central Bank of Cyprus. BoC considered the achievement of a superior Core Tier 1 ratio more important than profitability, as it would shield the Bank against deeper shocks and eventually improve the bank's credit rating, allowing the access to financial markets for funding in the medium and long term.<sup>37</sup>

<sup>34</sup> **Hazou, Elias.** October 14<sup>th</sup>, 2013. "Legal Challenge over BoC Restructuring." Cyprus Mail. <<http://cyprus-mail.com/2013/06/18/legal-challenge-over-boc-restructuring/>>.

<sup>35</sup> Bank of Cyprus Annual Financial Report 2013.

<sup>36</sup> Ibid

<sup>37</sup> Ibid

### *Recapitalization*

The recapitalization process of the Bank was completed on 30 July 2013, through the bail-in of deposits. Through the absorption of losses, the holders of ordinary shares and debt securities (see **Exhibit 26** for key information about debt securities) contributed to the recapitalization of BoC.

The Bank of Cyprus has issued equity to the Laiki Bank (Cyprus Popular Bank) for the acquisition of certain assets and liabilities (including insured deposits) in the context of the acquisition of the Laiki Bank's operations. After the bail-in of deposits and the issuance of equity, the Bank was considered adequately capitalized.<sup>38</sup> The legacy of Cyprus Popular Bank holds around 18% of BoC's share capital, the bail-in deposits owned 81% of the bank's share capital and the ordinary shares, arising from the conversion of outstanding debt securities accounted for less than 1% of the bank's share capital.<sup>39</sup>

### *The hole of Non-Performing Loans*

In John Hourican's perspective the issue of Non-Performing Loans was one of the most pressing issues at the bank: "This is an unprecedented situation that has happened to Cyprus and to the Bank of Cyprus, and I think that, while the problems are actually quite clear, the solutions are as of yet untested, and not clear to me given that I haven't yet taken full possession of the job."<sup>40</sup>

The expansion strategy to other geographies was driven by the BoC's risky lending policies, which potentiated the growth of Non-Performing Loans (**Exhibit 27**) and increased the riskiness of assets. In 2012, the Non-Performing Loans ratio reached 23.7% compared to 10.2% in 2011. By the end of this year, the level of provisions for impairment of loans reached €3.7 billion. At the end of 2013, NPLs amounted €14 042 million, which represented 53% of the gross loans (See **Exhibits 28** and **29**). In 2013, the NPL ratio was computed based on restructured loans that were due for less than 90 days (which represented 6% of gross loans) and loans as well as restructured loans that were due for more than 90 days (representing 47% of gross loans). The bank reported record losses for 2012 that amounted €2.3 billion on a rush in Non-Performing Loans as recession decreased the probability of repayment of

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<sup>38</sup> Ibid

<sup>39</sup> Ibid

<sup>40</sup> **Psyllides, George**. December 30<sup>th</sup>, 2013. "Cyprus Lenders Eye Banks Overhaul, State Selloffs in Review." Cyprus Mail. <<http://cyprus-mail.com/2013/10/29/cyprus-lenders-eye-banks-overhaul-state-selloffs-in-review/>>

debts from clients.<sup>4142</sup>

“NPLs (Non-Performing Loans) in Cyprus are by far the worst in Europe. NPLs are the single largest impediment to not only the banking sector but the economy” John Hourican said.<sup>43</sup> While defending that the state legislation should be urgently put in place to allow banks to address NPLs properly, Hourican said that it had been a recent stabilization, however, the CEO of the rival Hellenic Bank, Antonis Rouvas stated that it would not be possible to predict at what level the bad debts could stabilize.<sup>44</sup>

The lenders of Cyprus considered that it is crucial to restructure the debt so that the Cypriot financial adjustment programme succeeds and the CEO of BoC defended, on March 26<sup>th</sup>, 2014 that : “Bank of Cyprus is reviewing its restructuring plans in a move that could result in billions of euros of its troubled assets being put into a “bad bank”.”<sup>45</sup>

The bank hired HSBC Bank PLC to analyze BoC’s business plan and evaluate the feasibility of splitting itself into a good bank, with healthy loans backed by deposits, and a “bad bank”, with bad debt backed up by fresh funding. Through the creation of a “bad bank”, BoC would be able to continue its operations as before and get rid of troubled loans. This option was also taken into consideration in terms of the Cyprus’ bailout agreement with the European Union and the International Monetary Fund. On the other hand, the “bad bank” would be a separate legal entity that could not be qualified for the central bank funding as the Emergency liquidity (ELA) is only available for institutions which take deposits. Once an Asset Management Company is created, the designation of a deposit-taking institution is lost. For that reason, private investment – bonds or shares – would be needed to finance the split of the Bank of Cyprus.<sup>46</sup> “At the end of the day, funding will be what determines whether you can separate out your good bank and your not so good bank,” Hourican emphasized.<sup>47</sup>

<sup>41</sup> Bank of Cyprus Annual Financial Report 2012.

<sup>42</sup> Bank of Cyprus Annual Financial Report 2013.

<sup>43</sup> **Sinead, Kelly.** March 16<sup>th</sup>, 2014. “Senior Bankers Call for Swift NPL Reforms.” Cyprus Mail. <<https://cyprus-mail.com/2014/05/16/senior-bankers-call-for-swift-npl-reforms/>>.

<sup>44</sup> **Noonan, Laura.** March 30<sup>th</sup>, 2014. “‘Happily Ever After’ a Long Way off for Bank of Cyprus CEO.” Reuters. Thomson Reuters. <<http://www.reuters.com/article/bankofcyprus-ceo-idUSL5N0MP1MD20140330>>

<sup>45</sup> **Psyllides, George.** March 26<sup>th</sup>, 2014. “Bank of Cyprus Kicks off Review of Restructuring Plans.” Cyprus Mail. <<http://cyprus-mail.com/2014/03/26/bank-of-cyprus-kicks-off-review-of-restructuring-plans/>>

<sup>46</sup> Ibid

<sup>47</sup> Ibid

BoC's Board of Directors understood that to stabilize the bank, the Non-Performing Loans should be cleaned from the bank's balance sheet. However, by the end of March in some people's perspective, nothing relevant was done. "In our final report, we said that the bank needs to be separated from its toxic assets, which should be bought up by a "bad bank". This was in October, and still nothing has been done." commission member and former BoC senior manager Yiorgos Charalambous said.<sup>48</sup>

## 7. Split the bank or not?

So far everyone agreed that the NPLs needed to be significantly reduced and there were only four options on the table. First, the toxic assets could be transferred to a separate and legal Asset Management Company ("bad bank") where the loans would be monitored and restructured/ worked out. Secondly, and given that the previous separation of an entity is not always possible, it could be viable to separate NPLs from the bank through the creation of a separate department of the bank. The third option would be keeping NPLs in the balance sheet and manage them along with bank's operations. Although if the toxic loans deeply impact the bank activity negatively and if this is perceived by external participants, then the risk of keeping them on the balance sheet would increase heavily, as it can destroy the bank's credibility. If the separation of NPLs is not immediately addressed and solved, then the process of rebuilding the trust and credibility of the investors and clients would take much longer, which takes us to the last option: bankruptcy. If the bank is in such a difficult situation with no perspectives about the future impact of this gigantic crisis, won't it be less costly for the Cypriot government to pay for the secured deposits instead of recapitalizing a bank with so many problems?

On the other hand, the head of the bank continued to defend that BoC is analyzing every option: "We have appointed HSBC to help us look at our overall corporate finance agenda including the entire structure of how the group is organized. (...) "Hourican told Reuters in an interview.<sup>49</sup> Long discussions took place in the BoC board of directors' meetings, but by March 2014 the question still does not have an answer: How the bank will manage its huge bad debt? Is it really too big to manage?

<sup>48</sup> Anastasiou, Angelos. March 27<sup>th</sup>, 2014. "What Is a "bad bank"?" Cyprus Mail. <<http://cyprus-mail.com/2014/03/27/what-is-a-bad-bank/>>

<sup>49</sup> Psyllides, George. March 26<sup>th</sup> 2014. "Bank of Cyprus Kicks off Review of Restructuring Plans." Cyprus Mail. <<http://cyprus-mail.com/2014/03/26/bank-of-cyprus-kicks-off-review-of-restructuring-plans/>>

## Teaching Notes

### Relevance of the case in analysis

The aim of the case in analysis is to study the situation of a bank hit by a tremendous financial crisis and under fire, given the multiple pressures from all the stakeholders affected by its restructuring measures. Particularly, at the end of the case, the indecision of bank's board of directors regarding the best way of managing and/or getting rid of bad debt is shown. If on one side, John Hourican (Bank of Cyprus' CEO) defended that a "bad bank" should be created, on the other the board of directors thought of this idea as unacceptable, given the further losses that shareholders would have to support. The case will have a focus on banking system failures, the impact of a disproportional amount of bad debt and the best solution for a bank to manage it. For those reasons, this case can be analyzed in any course of Banking and some Corporate Finance courses. By solving this case, the students are expected to identify problems in the banking system of Cyprus and to understand the difficulty of making a decision about the separation of a bank into a good and bad part, as well as, explore financial benefits and practical issues from it. To reach the goals mentioned, a set of questions were formulated, as well as a suggested resolution. In the end, the decision made by the bank is presented in the Case Outcome Chapter.

### Proposed Case Analysis

#### *1. What caused the bankruptcy of the Bank of Cyprus? Did the bank manage the risks efficiently that it was exposed?*

There were many reasons for the collapse of the biggest lender on the island, although there were 6 that can be highlighted. In particular, the impairment losses of loans and advances and of Greek government bonds (GGBs), the constant deposit outflows since March of 2013 (when the bailout agreement was accepted), the difficulty of accessing to liquidity provided by other financial institutions, the vast branch network on specific and risky locations such as Greece, Russia, Romania, among others (which was significantly reduced by the end of 2013 as **Exhibit 7** shows), poor lending practices (managers' lack of criteria in conceding credit and the CBC's lack of lending restrictions referred in the case, were in the origin of default on loans) and the poor risk management adopted by the bank. Through **Exhibit 1 of the Teaching Notes (TN1)**, some ratios from 2011-2014 were calculated to support the information presented above. As

shown in **Exhibit 6**, and as referred in the case, the Bank of Cyprus invested heavily in Greek government bonds and most of those investments lost their value after Cyprus' bailout. With the information in **Exhibits 16** and **19**, the ratios of impairments and losses of GGBs to total impairments and provisions and impairments of GGBs to the Profit/Loss of the year (**TN1**) are computed and show the significant amount and impact of those losses in the financial performance of the bank. After the haircut of 47.5% of the uninsured deposits, the increase of the deposits outflows was inevitable. Between 2012 and 2013, the customer deposits had the substantial decrease of 47% (as shown in **Exhibit 17**). The deposits were not permanent funds and once a considerable part was from the interbank market, almost 20% of the deposits were withdrawn quickly after the haircut. Furthermore, the total value of deposits for total liabilities decreased by 41.5% (See **TN1**). Due to bad lending practices and while customers start to fail the payment of instalments, the percentage of NPLs to the gross loans increased by 10% from 2013-2014 (See **TN1**). All the reasons were interconnected and they reveal the weaknesses of the bank regarding the three main risks of Basel II (Credit Risk, Market Risk, and Operational Risk). On the Credit Risk's side, and as presented in **Exhibits 11** and **12**, the credit risk exposure increased suggestively between 2013 and 2014 and subsequently the quality of the credit was affected meaningfully. Even so, the high levels of the ratio of risk weighted assets (associated with credit risk) to loans and advances (see **TN1**) – that reach a value above 1 in 2013– revealed how badly the bank was managing credit risk. On the Market Risk's side, the analysis is focused more on the liquidity risk as it is a critical one for a company in the financial sector. The Loans to Deposits ratio (See **TN1**) have reached high levels in 2013 and 2014, demonstrating the inability of BoC to comply with any unpredictable capital requirements. Through the analysis of the liquidity coverage ratio and the capital ratios, it is clear that the bank did not pay attention to the vulnerability of its funds and did not build a solid liquidity fund against adversities such as a financial crisis.

## 2. *Evaluate the impact and size of Non-Performing Loans on the financial performance of BoC. Should they be sold?*

Non-Performing Loans are the sum of borrowed money that is in default, or close to being in default, as it is overdue for at least 90 days. Once a loan is categorized as non-performing, the probability of it being repaid is substantially lower. Additionally, a stricter regulation related to this category of assets was applied in Cyprus, which was considered “foolish” by BoC's CEO, as it established that if the proportion of Non-Performing Loans to the total loans of a customer is

superior to 20%, his/her total portfolio of loans is characterized as non-performing.<sup>50</sup> In **Exhibit 27**, the graphic of the evolution of the volume of NPLs of BoC shows an increase of around 200% in 2011-2014, which is impressive.

To evaluate the impact and size of Non-Performing Loans on the balance sheet, some ratios based on the financials were computed. The values of the ratios in **Exhibit 2 of the Teaching Notes (TN2)** are presented for the periods of 2013, the first semester of 2014 and the full year of 2014. The changes verified on the impact of NPLs, as well as the difference in numbers disclosure in short periods of time are given. Considering the ratios of Non-Performing Loans to gross loans and to total assets, it is verified that there is an increasing tendency for those ratios, which shows that the asset quality is being damaged, with percentage differences of around 13% in the first ratio. Finally, the NPLs to equity ratio shows that the value of equity is so residual that it cannot cover a quarter of the toxic assets.

Given the previous analysis, it is possible to conclude that the sale of Non-Performing Loans is imperative to improve the bank's financial performance and consequently, the BoC's reputation as it has to be able to manage all its assets. Through the sale of those assets, the Bank of Cyprus will be able to improve its liquidity and capital adequacy positions, possibly gain from the disposal of NPLs (very unlikely), reduce their holding costs (for example, management costs), minimize future provisions and improve market perception due to the NPL's proactive management.

3. *If a “bad bank” is created and the NPLs are transferred to this new entity, how would this division be done in accounting terms?*

In this question, the students are not expected to develop any complex model for the division of assets, liabilities, and equity of the bank, but to reflect on how this division can be done. First of all, it is necessary to define which data will be used. As the decision was discussed between March and July of 2014, the information used must be the one of the interim balance sheet. After that, it is necessary to identify the amount of NPLs in the balance sheet, as there is no accurate caption on the financial statements and the same are included in the caption of loans and advances to customers. By consulting **Exhibit 29**, it is possible to compute the percentage of NPLs to total gross loans, which is around 57%.

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<sup>50</sup> **Psillides, Constantinos**. November 30<sup>th</sup>, 2013. “CBC's Definition of NPLs Is 'foolish' and Will Prolong Recession, Says BoC CEO.” Cyprus Mail. <<http://cyprus-mail.com/2013/11/30/cbcs-definition-of-npls-is-foolish-and-will-prolong-recession-says-boc-ceo/>>



Having that in mind, we calculate a volume of NPLs of €11 563 366.53 , which corresponds to 57% of €20 063 034 (the total value of loans on the balance sheet). Following that, the captions of the balance sheet can be allocated to bigger groups: on the asset's side the current assets, the NPLs, the other loans and the other assets are included, and on the capital side 5 main groups are considered: the equity, the customer deposits, the other senior liabilities, the subordinated liabilities and the other liabilities. Through this division, it is easier to evaluate possible wipe outs. In this resolution, costs for establishing and running the "bad bank" are neglected for simplicity. When a "bad bank" entity is created, the probability of failing is high, and the good bank will get rid of the toxic assets. People will start to invest again, and the bank will be able to lend once more. The problem in the separation of a bank into a good and bad parts is the allocation of liabilities. In **Exhibit 3 of the Teaching Notes (TN3)**, two options for possible approaches to this division are presented: both considered acceptable. In the option 1, the way this division could be made in a reasonable way is studied. In this option, around 34% of the total liabilities are transferred to the "bad bank", which is not an official wipe out, but close. The good bank will keep the current assets and the other assets (with a total value of €11 016 553.47 ) because most of these assets are related to the bank's operating activities. It also gets the better part of non-current assets (specifically the other loans that are not toxic), while the "bad bank" gets the Non-Performing Loans, where some impairments were already considered by the bank, and further provisions are expected. The customer deposits are kept as liabilities of the good bank as it is strongly capitalized and the deposits are safe. Most of them are uninsured, and the creation of a "bad bank" decreases the risk of a run to the bank for the deposits. As shown in **Exhibit 3 of the Teaching Notes (TN3)**, 34% of total liabilities are transferred as well as the full amount of equity (as the shareholders should be the first to incur in losses) to the "bad bank" and consequently, the senior creditors must be the ones to receive their money back in first place that is why part of senior liabilities are kept in the good bank. The big question is: Which ones must be kept and which ones must be transferred or wiped out? According to the balance sheet and accounting rules, the priority must be placed on senior liabilities. The last option is based on finding separate financing for the "bad bank". In this case, around €11 billion, through new capital by selling shares to new investors, through loans from the Central Bank of Cyprus (as there is little chance that private investing will support such a capital increase) or by converting some debt into equity. Furthermore, only €3 billion of senior liabilities will be kept so the rest of creditors will be wiped out. In either option, the "bad bank" is



thinly capitalized, and it can experience further declines in the values of the toxic assets. In that case, the bondholders will have to renegotiate the amounts of debt, or the “bad bank” will need to be reorganized.<sup>51</sup>

#### 4. *What are the main advantages and disadvantages of each option to overcome that problem?*

In order to manage and get rid of the bank’s bad debt four main options were proposed: the creation of a “bad bank”, the creation of a department within the bank to manage NPLs, keeping the NPLs on the balance sheet and managing it along with other bank operations and filed for bankruptcy. All of them present several pros and cons that will be discussed below.

##### i) Creation of a “bad bank”

The “bad bank” is a separate entity with a significant amount of bad debt (in the BoC’s case, Non-Performing Loans) at market price. So, this transaction implies the total transfer of toxic assets to the “bad bank” as well as some write-downs where shareholders and bondholders are the only ones that can lose money. The key purpose of this entity is the absorption of toxic assets and their sales at a discount, as well as the possible sale of any collateral for profit. After selling all of its assets, the “bad bank” ceases to exist, as so far few “bad bank” entities have either profited or broken even.<sup>52</sup> Given the brief description, some advantages can immediately rise from the creation of a “bad bank”. The burden of recovering the Non-Performing Loans is transferred to another entity (and the speed of recovery can increase substantially), it can improve BoC’s capital position (as there is a total removal of bad assets from the bank’s balance sheet and transfer of the risk associated with the same), the “bad bank” can be specialized in the recovery of bad loans (as this will be its main job), the “bad bank” will not confront conflicts of interest with bad assets counterparties, it will enable the management team of the good bank to focus on the business operations and other assets and to lower monitoring costs for investors as the transparency will increase, the information asymmetry will be reduced and the investors, shareholders, market and rating agencies perceptions of BoC over its core businesses will improve.<sup>5354</sup> Besides the

<sup>51</sup> Ibid

<sup>52</sup> Anastasiou, Angelos. March 27<sup>th</sup>, 2014. “What Is a “bad bank”?” Cyprus Mail. <<http://cyprus-mail.com/2014/03/27/what-is-a-bad-bank/>>

<sup>53</sup> Januar 27<sup>th</sup>, 2016. “What Are “bad bank”s? What Are Its Pros and Cons?” Quora. <<https://www.quora.com/What-are-bad-banks-What-are-its-pros-and-cons>>

advantages presented, there are a lot of disadvantages associated with the creation of a “bad bank”. Given the significant pressure placed on the managers of those entities to obtain results, the same may not recover critical loans that are more difficult to recover and focus on easily recoverable loans. Also, the pressure may develop unethical ways of recovering NPLs and the unavailability of private investors to invest in these portfolios of loans. The value of the assets can be challenging to determine (long negotiations can result in additional write-downs or long-term opportunity costs), it requires the management of the shareholders’ expectations on an ongoing basis and the “bad bank” creation is complex and costly (it requires entirely separate organizational structures and IT systems).<sup>5556</sup> By separating the assets and liabilities as exposed in the previous question, the creditors would not be happy because they will hardly get paid back. The “bad bank” entity is not a bank legally so it cannot operate as a normal bank (it cannot concede loans, attract deposits, among other common transactions), so it cannot generate new assets to support and repay its debt. Moreover, in the case of the Bank of Cyprus there is a bigger issue regarding the Emergency Liquidity Assistance (ELA) which only covers deposit takers institutions and the creation of a “bad bank” would imply transferring part of this fund, in the form of short-term debt, to the Central Bank of Cyprus as the bad part of the bank is not a deposit taker entity.

## ii) Creation of an internal department

The internal department of the bank would be responsible for managing NPLs as its only purpose, however, and contrarily to the “bad bank”, the toxic assets would be on the group’s balance sheet. The unique difference from the third option resides on the creation of a task force to focus on the management of the bad debt. The main advantages of the creation of an internal department are the possible faster reduction of provisions related to Non-Performing Loans, the improvement of credit ratings as well as capital and debt markets perception (and consequently possible decrease of financing costs), the reestablishment of focus on business operations and strategy and the creation of a task force of managers that will be only responsible to recover Non - Performing Loans.<sup>57</sup> On the other hand, there are also some

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<sup>54</sup> **Brenna, Gabriel, Thomas Poppensieker, and Sebastian Schneider.** December 2009. "Understanding the “bad bank”." McKinsey & Company. <<http://www.mckinsey.com/industries/financial-services/our-insights/understanding-the-bad-bank>>

<sup>55</sup> Ibid

<sup>56</sup> Ibid

<sup>57</sup> **Anastasiou, Angelos.** March 29<sup>th</sup>, 2014. “Rehab Route for BoC's NPLs.” Cyprus Mail. <<http://cyprus-mail.com/2014/03/30/rehab-route-for-bocs-npls/>>

disadvantages associated with this option. Mainly, the continuous pressure from the administration to obtain results, the fact that the results of the department will continue to influence the profits of the group (and this can demotivate the employees of the bank) and the uncertainty about the performance of the managers of the department as their motivation and qualifications are not as good as in other bank's departments.

### iii) Keep NPLs on the balance sheet and manage it along with other bank operations

This option comprehends the solution of the bank by the time of the case, which is managing NPLs within the bank without separating the bank's operations to manage the toxic assets properly. By the time of the case, the bank is not being able to manage the big amount of NPLs that continue to impact negatively their financial performance and their reputation, so there no advantages associated with this option. Contrarily, the confidence and reputation of the bank will continue to be damaged ( in the case, there are quotes related to media and other stakeholders pressure and bad publicity to the bank's actions), the managers will only focus on the recovery of good loans once they will gain more money with it, the commercials responsible for selling credits will not be good debt collectors once they are trained to attract clients and sell products and not charging them, to reach a break-even point and recover bad debt the bank will have to change credit conditions and increase interest rates which will reduce its competitiveness and given that the bank will focus on conceding more credit and not so much recover bad debt, it will potentially lose money (for example, by conceding a new credit of €100 it can gain a spread of 2% but by recovering a bad debt of €100 already considered impaired it will gain €100).

### iv) Bankruptcy

In the fourth option, the possibility of the bank filing for bankruptcy or simply go bankrupt is considered. This was not an option put on the table for BoC's board of directors, however, it is important to analyze this possibility given the case in analysis and the critical situation of BoC, even after the resolution. Attending that the bank will possibly need the support of Cypriot government or of other governmental institutions, it is interesting to consider the benefits of this solution not only for the economy of Cyprus but for the bank itself. Nevertheless, it is important to emphasize that bankruptcy does not imply the cease of operations. In the case of the bank, the options would be to file for Chapter 7

(where some creditors are wiped out, and other assets are sold to pay the creditors) or Chapter 11 (that is available for businesses which want to continue its operations and reschedule the repayment of loans).<sup>58</sup> The principal benefits of bankruptcy are the fact that unsecured debts (except for deposits) are automatically wiped out, the costs of bankruptcy are lower than the ones of bank recovery, and somehow the creditors are powerless to collect from the debtor.<sup>59</sup> On the other hand, the bank can be obliged to sell some collaterals and assets to repay debt, and it will not have the right to tax loss deduction.<sup>60</sup>

##### 5. *What is the best option for the Bank of Cyprus given its current situation?*

After analyzing the two previous questions, the students are expected to come to a conclusion based on the facts investigated previously. Given the advantages and disadvantages presented in question 6, it is possible to conclude that options 3 and 4 (keep the NPLs and do nothing and bankruptcy options) are not viable. Bankruptcy does not make sense at this point as the bank already applied so many measures and is expected to be recovered as it is the biggest lender on the island. If it goes bankrupt, this can deeply “hurt” the economy and Cyprus’ credibility as a safe financial center. Moreover, given the efforts made up to now and the progress verified, the NPLs are the most serious problem to be addressed. The option of doing nothing is unacceptable in the way that the NPLs need to be addressed appropriately. Therefore, by not allocating a team or department to manage the toxic assets, the managers will lose their focus, and it will be difficult to recover public interest and trust in the bank. Having all that in mind, it is now time to decide if the bank should be separated into good and “bad bank” entities or if an internal department should be created. In order to make this decision, computing the value creation of both options is suggested. Even though there are no market values to calculate value creation from traditional methods such as EVA; it is possible to calculate the value created by each option by exploring the frictions in the market as defended by Modigliani and Miller. According to the MM theory, it is not possible to create financial value if a company is separated in different slices, unless there are frictions in the market. These frictions can be tax benefits, regulatory requirements, among others. Moreover, it defends that with no corporate

<sup>58</sup> **Peavler, Rosemary.** “Understanding the Different Types of Business Bankruptcy.” The Balance. <<https://www.thebalance.com/what-is-business-bankruptcy-393017>>

<sup>59</sup> “Bankruptcy: Advantages and Disadvantages.” Findlaw. <<http://bankruptcy.findlaw.com/what-is-bankruptcy/pros-and-cons-of-declaring-bankruptcy.html>>

<sup>60</sup> Ibid

taxes the firm's proportions of debt and equity does not matter. On the other hand and when considering tax benefits, the company with the greater portion of debt is more valuable because of the interest tax shield.<sup>61</sup> In BoC's particular case, it is interesting to explore value creation especially for old shareholders through three main factors: tax deductions of bad debt (and interest tax shield), credit rating improvement of liabilities and transference of value from shareholders to bondholders through new capital increases. Furthermore, it is possible to explore improvements in the capital adequacy ratio with and without the division of the bank. The computation of the values is presented in **Exhibits 4, 5, 6 and 7 of the Teaching Notes**. In the case of tax deductions of bad debt and interest tax shield, if a "bad bank" is created almost none can add value to the company because the bad assets will be transferred to the "bad bank" and around 44% of liabilities too. According to Cyprus' tax laws, provisions of bad debt can be deductible "if the taxpayer can evidently prove that sufficient steps were taken before hand to recover them"<sup>62</sup>. In BoC's case, the provisions amount reach the level of €329.12 million. Considered the corporate tax of 12.6% in Cyprus, it is possible to compute tax deductions of the bad debt for the bank when it is not separated and none if it is. This is due to the fact that toxic assets are in the bad part of the bank and this part will not make profits. About the interest tax shield, the same referred before also happens to the liabilities that are transferred to the "bad bank", so the tax deductions with the separation are bigger as shown in **TN7**. If the bank assets are divided, and the bad debt kept only in one entity, it is assumed a possible improvement in the credit rating of liabilities. With the information given it is possible to improve the accuracy of calculations. By consulting the **Exhibit 26**, detailed information about bonds issued (covered bonds and bonds guaranteed by the Cypriot government) is available and the price and the yield of the bonds, as well as the cost of debt are computed (see **Exhibit 4 of the Teaching Notes (TN4)**). As the financial theory defends, the relation between the yield of bonds and the credit rating is not linear because the rating downgrade or upgrade impacts directly the bond prices and yields. Moreover, not all investors are up to buy a "junk" bond, given its high risk (sometimes the rewards associated with those bonds do not compensate the risk as the investor can easily lose all his/her money), it requires investment on some essential analytical skills, and it is not allowed in some countries. If the rating improves, then BoC's credit risk decreases and the required rate

<sup>61</sup> Berk, Jonathan B., and Peter M. DeMarzo. 2017. "Corporate Finance". Harlow, Essex: Pearson Education Limited.

<sup>62</sup> PriceWaterhouseCoopers. 2017 (Last reviewed). "Cyprus Corporate-Deductions". <taxsummaries.pwc.com/ID/Cyprus-Corporate-Deductions

of return on the debt decreases as well. As shown in **Exhibit 5 of the Teaching Notes (TN5)**, an improvement in credit rating from B1<sup>63</sup> to Baa1<sup>64</sup> and Baa3<sup>65</sup> respectively, corresponds to the reduction of the cost of the debt once the bonds are not considered “junk” anymore and the risk of default decreases and the bond markets do not require higher yields as before. Assuming that, 50% of the government bonds and 100% of covered bonds are kept in the good bank given its seniority, the average cost of debt is computed as shown in **Exhibit 5 of the Teaching Notes (TN5)**. If the bank is not separated, the cost of debt will be equal to €86 732 thousands and €82 549 thousands if a “bad bank” entity is created. So, with bank separation into a good and bad entities, there is a value creation of €4.18 million. Furthermore, if a “bad bank” is not created the government will impose a new capital increase. Again, the losses will go over the old shareholders, and this transaction is considered a value loss from the value transference from former shareholders to creditors, as these last will receive money from the capital increase and the shareholders’ shares will be more devaluated. Considering the number of shares issued with the capital increase made on July 2014 (namely 4 166 667 shares) at a nominal price of €0.24 and considering the market share price of €2.97<sup>66</sup> (February 3<sup>rd</sup>, 2017) it is possible to compute the value loss for shareholders if the bank is not separated. Finally, and making a proportion of risk weighted assets with and without the creation of the “bad bank” and considering the data of 2013 annual report, it is possible to determine that the capital adequacy ratio would be much better with the separation of the bank (see **TN7**). In conclusion, and observing the value creation through the separation of the bank (€24 million) and the non-separation (€60 million), the creation of an internal department is undoubtedly the more reasonable one as it offers greater tax deductions, the losses incurred through the process are not as significant as value created in the future and the cost of debt reduction due to the separation of liabilities is not significant as value created through tax deductions. Moreover, with the imposition of a new capital increase the capital adequacy ratio is expected to accomplish the regulatory requirements.

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<sup>63</sup> Information available on the 2014 Mid-year financial report

<sup>64</sup> **Global Credit Research**. September 29<sup>th</sup>, 2015. “Moody’s upgrades Bank of Cyprus’ covered bond ratings to Baa3”. Moody’s Investors Service <[www.moodys.com](http://www.moodys.com)>

<sup>65</sup> **Global Credit Research**. November 11<sup>th</sup>, 2016. “Moody’s changes outlook on Cyprus’ B1 to positive affirms ratings.” Moody’s Investors Service <[www.moodys.com](http://www.moodys.com)>

<sup>66</sup> February 3<sup>rd</sup>, 2017. <[www.yahoo.finance.com](http://www.yahoo.finance.com)>

## The Case Outcome

Up until the case's date (May 2017), a lot has been made and said. Although, the volume of Non-Performing Loans have been reduced, they are still at an unacceptable level. (See **Exhibit 8 of Teaching Notes (TN8)**). On June of 2014, the Bank of Cyprus was exploring the interest in a potential capital increase of at least €1 billion. According to the Cypriot media, a three-day ultimatum from the Governor of the Central Bank of Cyprus was sent to the bank's board to raise at least €1 billion by August 8. Since he assumed the position of CEO, John Hourican was fighting and working on shoring up BoC's capital and refocusing in Cypriot market by decreasing foreign branch network.<sup>67</sup> On July of 2014, the Financial Times announced that the Non-Performing Loans had been shifted into an internal department responsible for running down, restructuring and selling the toxic assets. At the same time, some customers whose deposits were seized were selling the shares of the bank at a discount to recover part of the losses they had suffered. In the same month, the new investors agreed to buy all the €1 billion shares that were being sold by the bank. The proceeds from this sale were used to repay ELA (the Emergency Liquidity Assistance provided by Eurozone Central Banks). With the successful capital increase, the bank was able to pass the European stress tests and with the highest capital ratio of the sector of 14.9% (under the rules of Basel III). It additionally brought valuable names, for example Wilbur Ross and Josef Ackermann, onto the shareholder enlist and onto the board.<sup>68</sup> In November of 2014, John Hourican referred that "the lender was at war with the circumstance, as the ratio of Non-Performing Loans remained "still unacceptable" even after stabilized." At the shareholder's meeting, the BoC's CEO warned that by the end of the year the stockholders would continue to have to make a "delicate extraordinary effort" to face the extremely high levels of delays and toxic assets.<sup>69</sup> By the end of the year 2014, the Non-Performing Exposures (NPEs) represented 63% of gross loans (with a total value of €14 billion), and the provision coverage ratio was still in 34%.<sup>70</sup>

<sup>67</sup> **Arnold, Martin.** June 3<sup>rd</sup>, 2014. "Bank of Cyprus to Offload Lossmaking Russian Lender." Financial Times. <<https://www.ft.com/content/a1c336be-eb2a-11e3-9c8b-00144feabdc0>>

<sup>68</sup> **Arnold, Martin, and Kevin Hope.** July 28<sup>th</sup>, 2014. "Bank of Cyprus to Raise €1bn through Share Sale." Financial Times. <<https://www.ft.com/content/dee5fd30-16a2-11e4-a5c7-00144feabdc0>>

<sup>69</sup> **Orphanides, Stelios.** November 25<sup>th</sup>, 2014. "Hourican Tells Shareholders Bank of Cyprus Still at War with Circumstance (Update)." Cyprus Business Mail. <<http://cyprusbusinessmail.com/?p=1034>>

<sup>70</sup> Bank of Cyprus Annual Financial Report 2014.

## Nomenclature

**BoC** – Bank of Cyprus

**CBC** – Central Bank of Cyprus

**ECB** – European Central Bank

**IMF** – International Monetary Fund

**NPLs** - Non-Performing Loans

**MM** – Modigliani and Miller

**GGBs** – Greek Government Bonds

## Bibliography References

**Authority M, Market M, Paraskevi A** . 2017. BANK OF CYPRUS HOLDINGS PUBLIC LIMITED COMPANY The Cyprus Investment and Securities Corporation Limited.

**Clerides M, Stephanou C** . 2009 . "The Financial Crisis and the Banking System in Cyprus". Cyprus Econ Policy Rev 5:1–19. doi: 10.1080/00358533808450959~

**Clerides S** . 2014. "The Collapse of the Cypriot Banking System: A Bird's Eye View. Cyprus" Econ Policy Rev 8:3–35.

**Dübel H-J** . 2013 . "The capital structure of banks and practice of bank restructuring".

**Hardouvelis GA** . 2014 . "Overcoming the crisis in Cyprus". Econ Mark Eurobank Res IX:1–20.

**Orphanides A** .2014. "What Happened in Cyprus? The Economic Consequences of the Last Communist Government in Europe".

**Panayi E, Zenios SA** . 2015. "Was the Cyprus crisis banking or sovereign debt?" Banks Bank Syst 10:23–33.

**Stephanou C** .2011a . "Big Banks In Small Countries: The Case Of Cyprus". Cyprus Econ Policy Rev 5:3–21.

**Stephanou C** . 2011b . "The Banking System in Cyprus: Time to Rethink the Business Model?" Cyprus Econ Policy Rev 5:123–130.



**Scardovi, Claudio.** 2016 . "Holistic Active Management of Non-Performing Loans." Cham: Springer, 2016. 16-22.

**Gilson, Stuart C.** 2010 . "Creating Value through Corporate Restructuring: Case Studies in Bankruptcies, Buyouts, and Breakups." Hoboken, NJ: Wiley.

**González, Altina de Fátima Sebastián, Pascual, Joaquín López** . November 2015 . "Economia e Gestão Bancária", Universidade Católica Editora

**Phylaktis, Kate.** 2014 . "Banking System of Cyprus: Past, Present and Future". London

**Saunders, Anthony, and Marcia Millon Cornet.** 2017 . "Financial Institutions Management a Risk Management Approach." New York: McGraw-Hill Education.

**Sibert, Anne.** July 3<sup>rd</sup>, 2015. "Greek Debt Crisis: Lessons from Cyprus and Iceland." *BBC News*. BBC. <<http://www.bbc.com/news/world-europe-33354036>>

"Cyprus Banking Crisis: Causes and Consequences." July 10<sup>th</sup>, 2014. *Cyprus Profile*. <<http://www.cyprusprofile.com/en/articles/view/cyprus-banking-crisis-causes-and-consequences-bailout>>

**Cyprus Mail.** July 20<sup>th</sup>, 2014. "Why Bank of Cyprus Needs Additional Capital." *Cyprus Mail*. <<http://cyprus-mail.com/2014/07/20/why-bank-of-cyprus-needs-additional-capital/?hilite=non+performing+loans+boc>>

**Cyprus Mail.** June 28<sup>th</sup>, 2014. "Bank of Cyprus Says Examining Capital, Funding Options." *Cyprus Mail*. <<http://cyprus-mail.com/2014/06/28/bank-of-cyprus-says-examining-capital-funding-options-2/?hilite=non%2Bperforming%2Bloans%2Bboc>>

**Anastasiou, Angelos.** April 26<sup>th</sup>, 2014. "Funding for BoC "bad bank" Is New Headache for Board." *Cyprus Mail*. <http://cyprus-mail.com/2014/04/26/funding-for-boc-bad-bank-is-new-headache-for-board/?hilite=bad%2Bbank%2Bboc>

**Psyllides, George.** April 24<sup>th</sup>, 2014. "BoC to Discuss Creation of Development Bank." *Cyprus Mail*. <<http://cyprus-mail.com/2014/04/24/boc-to-discuss-creation-of-development-bank/?hilite=bad%2Bbank%2Bboc>>

**Cyprus Mail.** March 29<sup>th</sup>, 2014. "Our View: Good and "bad bank" Split Could Be Only Option for BoC." *Cyprus Mail*. <<http://cyprus-mail.com/2014/03/29/our-view-good-and-bad-bank-split-could-be-only-option-for-boc/?hilite=bad+bank+boc>>

**Turner, Katy.** April 12<sup>th</sup>, 2014. "Tales from the Coffeeshop: Knives Are out over Creation of a "bad bank"." *Cyprus Mail*. <<http://cyprus-mail.com/2014/04/13/tales-from-the-coffeeshop-knives-are-out-over-creation-of-a-bad-bank/?hilite=bad%2Bbank%2Bboc>>

**Bandyopadhyay, Tamal.** March 26<sup>th</sup>, 2017. "Bad Loan Resolution: It's Now or Never." *Livemint*, <<http://www.livemint.com/Opinion/HTTU0wRpaahSLWSRTGmB4O/Bad-loan-resolution-Its-now-or-never.html>>

8 February 2009. "Good Bank/New Bank vs. "bad bank": A Rare Example of a No-brainer." Financial Times. <<http://blogs.ft.com/maverecon/2009/02/good-banknew-bank-vs-bad-bank-a-rare-example-of-a-no-brainer/#axzz4e4mmdbQ8>>

**Goldman, Russell.** March 21<sup>st</sup>, 2013. "The Cyprus Crisis Explained (Like You're an Idiot)." ABCNews. <<http://abcnews.go.com/Business/cyprus-crisis-explained-idiot/story?id=18782212>>

September 29<sup>th</sup>, 2014. "John Hourican: Story of Cyprus Is Worth Investing In." GOLD News. <<http://www.goldnews.com.cy/en/financial-services/john-hourican-story-of-cyprus-is-worth-investing-in>>

"Legal Framework." Regulations & Directives - Central Bank of Cyprus. <[http://www.centralbank.gov.cy/nqcontent.cfm?a\\_id=10838&lang=en](http://www.centralbank.gov.cy/nqcontent.cfm?a_id=10838&lang=en)>

**Team, E. R.** October 6<sup>th</sup>, 2015. "Central Bank of Cyprus. A Brief History." <<https://cypruscompanyformation.com.cy/central-bank-of-cyprus/>>

"Transfer of Ex Laiki Bank Accounts to the Electronic Systems of Bank of Cyprus." Bank of Cyprus. <<http://www.bankofcyprus.com.cy/en-GB/Internet-Banking/RIGHT/Transfer-of-ex-Laiki-Bank-accounts-to-the-electronic-systems-of-Bank-of-Cyprus/>>

**Kremer, William.** April 6<sup>th</sup>, 2013. "Laiki Bank: The Cyprus Bank Staff Hit Worst of All." BBC News. BBC. <<http://www.bbc.com/news/magazine-22042727>>

**Steve.** May 10<sup>th</sup>, 2013. "Bank of Cyprus & the Cypriot Financial Crisis - Republic of Cyprus - Research Paper." <<https://www.otherpapers.com/Business/Bank-of-Cyprus-the-Cypriot-Financial-Crisis/46711.html>>

"Cyprus Bank Crisis: Deposit Confiscation Visualized." <[http://demonocracy.info/infographics/eu/cyprus\\_crisis/cyprus\\_crisis.html](http://demonocracy.info/infographics/eu/cyprus_crisis/cyprus_crisis.html)>

"Credit Ratings." Welcome - Bank of Cyprus Group. <<http://bankofcyprus.com/en-GB/Start/Investor-Relations/Credit-Ratings/>>

**Spiegel, Peter.** February 20<sup>th</sup>, 2012. "S to Ensure Greek Default Avoided." Financial Times. <<https://www.ft.com/content/418d070a-5be1-11e1-bbc4-00144feabdc0>>

March 28<sup>th</sup>, 2012. "Orphanides Is Leaving Cypriot Economy in a Worse State." Financial Times. <<https://www.ft.com/content/0a81cbf8-776e-11e1-827d-00144feab49a>>

June 8<sup>th</sup>, 2012. "Bank of Cyprus Plans to Join FSCS." Financial Times. <<https://www.ft.com/content/da3012c4-afc7-11e1-a025-00144feabdc0>>

**Hope, Kevin.** January 31<sup>st</sup>, 2013. "Cyprus Investors Fear Bank Bailout Losses." Financial Times. <<https://www.ft.com/content/af602e60-6bd0-11e2-a700-00144feab49a>>

**Spiegel, Peter.** March 16<sup>th</sup>, 2013. "Cypriot Bank Deposits Tapped as Part of €10bn Eurozone Bailout." Financial Times. <<https://www.ft.com/content/33fb34b4-8df8-11e2-9d6b-00144feabdc0>>

**Moore, Elaine.** March 18<sup>th</sup>, 2013. "Savers Suffer in Cyprus." Financial Times. <<https://www.ft.com/content/7c5e1880-8efb-11e2-a39b-00144feabdc0>>

**Steen, Michael.** March 20<sup>th</sup>, 2013. "Q&A: The ECB and Cyprus's Banks." Financial Times. <<https://www.ft.com/content/30f6a87a-9163-11e2-b4c9-00144feabdc0>>

March 19<sup>th</sup>, 2013. "Cypriot Banks: Ugly Picture." Financial Times. <<https://www.ft.com/content/35a93476-90b6-11e2-a456-00144feabdc0>>

March 21<sup>st</sup>, 2013. "Cyprus Targets Big Depositors in Bank Plan." Financial Times. <<https://www.ft.com/content/5adf82bc-9201-11e2-851f-00144feabdc0>>

March 22<sup>nd</sup>, 2013. "Cyprus: A Poor Diagnosis, a Bitter Pill." Financial Times. <<https://www.ft.com/content/a8c52cc6-92e6-11e2-b3be-00144feabdc0>>

March 22<sup>nd</sup>, 2013. "Cyprus MPs Vote for Financial Sector Restructuring." Financial Times. <<https://www.ft.com/content/08e9ae20-9318-11e2-9593-00144feabdc0>>

March 25<sup>th</sup>, 2013. "Russians Seek Ways to Beat Cyprus Curbs." Financial Times. <<https://www.ft.com/content/5007a1fc-9577-11e2-a4fa-00144feabdc0>>

March 26<sup>th</sup>, 2013. "Cyprus to Impose Capital Controls." Financial Times. <<https://www.ft.com/content/b5713670-9644-11e2-b8dd-00144feabdc0>>

March 30<sup>th</sup>, 2013. "Bank of Cyprus Haircut Could Reach 60%." Financial Times. <<https://www.ft.com/content/4a1bb1d6-9926-11e2-af84-00144feabdc0>>

March 31<sup>st</sup>, 2013. "Bank of Cyprus – the Noose Tightens." Financial Times. <<https://www.ft.com/content/7f339d26-9a06-11e2-83ca-00144feabdc0>>

**Barnhoorn, Jan Willem.** October 13<sup>th</sup>, 2016. "Bank Of Cyprus: A Little Miracle No One Seems To Notice." Seeking Alpha. <<https://seekingalpha.com/article/4012015-bank-cyprus-little-miracle-one-seems-notice>>

June 1<sup>st</sup>, 2013. "Cyprus Seizes Billions in Assets of Former Laiki Bosses." Financial Times. <<https://www.ft.com/content/b5598352-ca1c-11e2-8f55-00144feab7de>>

July 28<sup>th</sup>, 2013. "Bank of Cyprus Close to Depositor Deal." Financial Times. <<https://www.ft.com/content/b94a58f6-f794-11e2-87ec-00144feabdc0>>

September 10<sup>th</sup>, 2013. "Protests as Bank of Cyprus Shareholders Elect New Board." Financial Times. <<https://www.ft.com/content/ec28771a-1a5f-11e3-93e8-00144feab7de>>

3 June 2014. "Bank of Cyprus to Offload Lossmaking Russian Lender." Financial Times. <<https://www.ft.com/content/a1c336be-eb2a-11e3-9c8b-00144feabdc0>>

4 July 2014. "Bank of Cyprus Eyes €1bn Fundraising Push." Financial Times. <<https://www.ft.com/content/a765f9c6-037b-11e4-9195-00144feab7de>>

22 July 2014. "Bank of Cyprus Eyes First Post-crisis Bond Sale." Financial Times. <<https://www.ft.com/content/95b05c32-11c0-11e4-8279-00144feabdc0>>

6 October 2014. "Josef Ackermann to Join Bank of Cyprus Board." Financial Times. <<https://www.ft.com/content/d0100c00-4d76-11e4-9683-00144feab7de>>

3 December 2014. "Bank of Cyprus: Caged Bears." Financial Times. <<https://www.ft.com/content/57d4077c-7afe-11e4-8646-00144feabdc0>>

**Arnold, Martin.** 15 December 2014. "Bank of Cyprus Shares to Resume Trading." Financial Times. <<https://www.ft.com/content/60320adc-847b-11e4-ba4f-00144feabdc0>>

**Cyprus Mail.** 03 November 2016. "Our View: It Will Take Much More than Positive Statements to Restore Confidence." Cyprus Mail. <<http://cyprus-mail.com/2013/07/31/our-view-it-will-take-much-more-than-positive-statements-to-restore-confidence/?hilite=boc%2Bshareholders>>

**Cyprus Mail.** 03 November 2016. "Our View: Business and Political Leaders Stuck to Cowardly Code of Silence." Cyprus Mail. <<http://cyprus-mail.com/2013/07/07/our-view-business-and-political-leaders-stuck-to-cowardly-code-of-silence/?hilite=boc%2Bshareholders>>

**Pantelides, Poly.** 09 September 2013. "How the Banking Sector Was Destroyed." Cyprus Mail. <<http://cyprus-mail.com/2013/09/08/how-the-banking-sector-was-destroyed/?hilite=boc%2Bshareholders>>

**Psyllides, George.** 20 December 2013. "Stricken Bank Depositors Seek Compensation from EU." Cyprus Mail. <<http://cyprus-mail.com/2013/12/20/stricken-bank-depositors-seek-compensation-from-eu/?hilite=boc%2Bshareholders>>

**Hazou, Elias.** 14 October 2013 "Legal Challenge over BoC Restructuring." Cyprus Mail. <<http://cyprus-mail.com/2013/06/18/legal-challenge-over-boc-restructuring/?shareholders>>

1 August 2013. "New Bank of Cyprus Shareholders Hold 81% of Share Capital." Financial Mirror. <http://www.financialmirror.com/news-details.php?nid=30577>>

**Team, CM Marine.** 15 October 2013. "How We Could Deal with Transfer of BoC Assets." Cyprus Mail. <<http://cyprus-mail.com/2013/07/15/how-we-could-deal-with-transfer-of-boc-assets/?hilite=boc%2Bshareholders>>

**Pantelides, Poly.** 15 October 2013. "'There Was a Concerted Move to Blame the Banks' Said Former BoC Boss." Cyprus Mail. <<http://cyprus-mail.com/2013/07/23/there-was-a-concerted-move-to-blame-the-banks-said-former-boc-boss/?hilite=boc%2Bshareholders>>

November 3<sup>rd</sup>, 2016. "Our View: Is There Any Solution for BoC That Would Be Acceptable to Everyone?" Cyprus Mail. <<http://cyprus-mail.com/2013/07/23/our-view-is-there-any-solution-for-boc-that-would-be-acceptable-to-everyone/?hilite=boc%2Bshareholders>>

**Cyprus Mail.** November 11<sup>th</sup>, 2013. "Bill to Give Former BoC Employees Bank Shares." Cyprus Mail. <<http://cyprus-mail.com/2013/11/12/bill-to-give-former-boc-employees-bank-shares/?hilite=boc%2Bemployees>>

**Hazou, Elias.** October 14<sup>th</sup>, 2013. "Redundant BoC Staff Have No Access to Provident Fund." Cyprus Mail. <<http://cyprus-mail.com/2013/09/24/redundant-boc-staff-have-no-access-to-provident-fund/?hilite=boc%2Bemployees>>

**Christou, Jean.** August 2<sup>nd</sup>, 2013. "One Quarter of BoC Staff Applied for Voluntary Retirement." Cyprus Mail. <<http://cyprus-mail.com/2013/08/02/one-quarter-of-boc-staff-applied-for-voluntary-retirement/?hilite=boc%2Bemployees>>

**Psyllides, George.** July 8<sup>th</sup>, 2013. "BoC Retirement Scheme Comes into Force." Cyprus Mail. <<http://cyprus-mail.com/2013/07/08/boc-retirement-scheme-comes-into-force>>

**Psyllides, George.** June 18<sup>th</sup>, 2013. "Bank of Cyprus to Cut Salaries by up to 30 per Cent." Cyprus Mail. <<http://cyprus-mail.com/2013/06/18/bank-of-cyprus-to-cut-salaries-by-up-to-30-per-cent/?hilite=boc%2Bemployees>>

**Psyllides, George.** October 14<sup>th</sup>, 2013. "The Road Back from Zero Trust." Cyprus Mail. <<http://cyprus-mail.com/2013/08/11/the-road-back-from-zero-trust>>

**Cyprus Mail.** November 3<sup>rd</sup>, 2016. "Our View: BoC Cannot Afford to Hold on to Assets until a Better Day." Cyprus Mail. <<http://cyprus-mail.com/2013/07/28/boc-cannot-afford-to-hold-on-to-assets-until-a-better-day/?hilite=boc%2Bcustomers>>

"Largest Banks in Cyprus." Cyprus.com. <<http://www.cyprus.com/largest-banks-in-cyprus.html>>

**Evrpidou, Stefanos.** October 23<sup>rd</sup>, 2013. "Bank of Cyprus Appoints New CEO (updated)." Cyprus Mail. <<http://cyprus-mail.com/2013/10/22/bank-of-cyprus-appoints-new-ceo/?hilite=hourican>>

**Turner, Katy.** October 29<sup>th</sup>, 2013. "BoC Confident It Can Support Cypriot Economy." Cyprus Mail. <<http://cyprus-mail.com/2013/10/29/boc-confident-it-can-support-cypriot-economy>>

**Cyprus Mail.** December 29<sup>th</sup>, 2013. "What Say You John Hourican, CEO Bank of Cyprus?" Cyprus Mail. <<http://cyprus-mail.com/2013/12/29/what-say-you-john-hourican-ceo-bank-of-cyprus/?hilite=hourican>>.

**Cyprus Mail.** November 7<sup>th</sup>, 2016. "Our View: Good and "bad bank" Split Could Be Only Option for BoC." Cyprus Mail. <<http://cyprus-mail.com/2014/03/29/our-view-good-and-bad-bank-split-could-be-only-option-for-boc/?hilite=hourican>>

**Psyllides, George.** January 29<sup>th</sup>, 2014. "Bondholders Try to Storm BoC Headquarters." Cyprus Mail. <<http://cyprus-mail.com/2014/01/28/bondholders-try-to-storm-boc-headquarters>>



**Anastasiou, Angelos.** May 16<sup>th</sup>, 2014. "BoC Struggles with Mounting Troubles." Cyprus Mail. <<http://cyprus-mail.com/2014/05/16/boc-struggles-with-mounting-troubles> >

**Anastasiou, Angelos.** May 31<sup>st</sup>, 2014. "BoC Scores Small Profit but 'too Early to Call This a Sustainable Trend'." Cyprus Mail.<<http://cyprus-mail.com/2014/05/31/boc-scores-small-profit-but-too-early-to-call-this-a-sustainable-trend/?hilite=hourican>>

**Patroclos.** November 3<sup>rd</sup>, 2016. "Tales from the Coffeeshop: A Curious Outbreak of Non-performing Brains." Cyprus Mail.<<http://cyprus-mail.com/2013/09/08/tales-from-the-coffeeshop-a-curious-outbreak-of-non-performing-brains>>

**Charalambous, Loucas.** November 3<sup>rd</sup>, 2016. "BoC Must Be Allowed to Deal with Big NPLs Separately." Cyprus Mail. <<http://cyprus-mail.com/2013/09/15/boc-must-be-allowed-to-deal-with-big-npls-separately/?hilite=non%2Bperforming%2Bloans%2Bvoc>>

**Stevenson, Peter.** September 23<sup>rd</sup>, 2013. "Taking Care of Non-Performing Loans." Cyprus Mail. <<http://cyprus-mail.com/2013/09/22/taking-care-of-non-performing-loans> >

**Cyprus Mail.** May 6<sup>th</sup>, 2014. "Why the Definition of NPLs in Cyprus Is Discriminatory." Cyprus Mail.<<http://cyprus-mail.com/2014/05/06/why-the-definition-of-npls-in-cyprus-is-discriminatory>>

**Cyprus Mail.** November 4<sup>th</sup>, 2013. "Why Bank of Cyprus Should Not Be Separated." Cyprus Mail.<<http://cyprus-mail.com/2013/11/03/why-bank-of-cyprus-should-not-be-separated> >

**Cyprus Mail.** August 30<sup>th</sup>, 2014."Hourican: NPL Recovery Stymied by 'poor' Legal System." Cyprus Mail. <<http://cyprus-mail.com/2014/05/29/hourican-npl-recovery-stymied-by-poor-legal-system/?hilite=non%2Bperforming%2Bloans%2Bvoc>>

"The Bank." The Bank - Central Bank of Cyprus. <<http://www.centralbank.gov.cy/> >

**Writer, Leaf Group.** September 29<sup>th</sup>, 2016. "Advantages & Disadvantages of Companies Filing Bankruptcy." Back.Azcentral.com.<<http://yourbusiness.azcentral.com/advantages-disadvantages-companies-filing-bankruptcy-28151.html>>

"Recapitalization of Bank of Cyprus - H&P Accountants - Accountants and Auditors in Cyprus." News & Publications. <<http://hpa.com.cy/news-read/recapitalization-of-bank-of-cyprus>>

**Writer, Leaf Group.** October 26<sup>th</sup>, 2016. "What Happens When a Bank Writes Off a Bad Debt?" <<http://smallbusiness.chron.com/happens-bank-writes-off-bad-debt-58308.html>>

**Schaefer, Dorothea, and Klaus F. Zimmermann.** "'bad bank'(s) and Recapitalization of the Banking Sector." SSRN Electronic Journal (n.d.)

July 13<sup>th</sup>, 2014. "Bank of Cyprus Customers Cut Their Losses." Financial Times. <<https://www.ft.com/content/89351ec8-f223-11e3-9015-00144feabdc0>>

January 19<sup>th</sup>, 2017. "Bank of Cyprus: Back from the Dead." Financial Times. <<https://www.ft.com/content/47ec92b8-de55-11e6-86ac-f253db7791c6>>

April 30<sup>th</sup>, 2017. "Capital Adequacy Ratio." Wikipedia. Wikimedia Foundation.  
<[https://en.wikipedia.org/wiki/Capital\\_adequacy\\_ratio](https://en.wikipedia.org/wiki/Capital_adequacy_ratio)>

"BOCH.L : Summary for BANK OF CYPRUS HOLDINGS PUBLIC." Yahoo! Finance.  
Yahoo!, n.d. . <<https://finance.yahoo.com/quote/BOCH.L?p=BOCH.L>>.

## **Appendix**

### **Case Study - Bank of Cyprus' Bad Debt: Too Big to Manage?**



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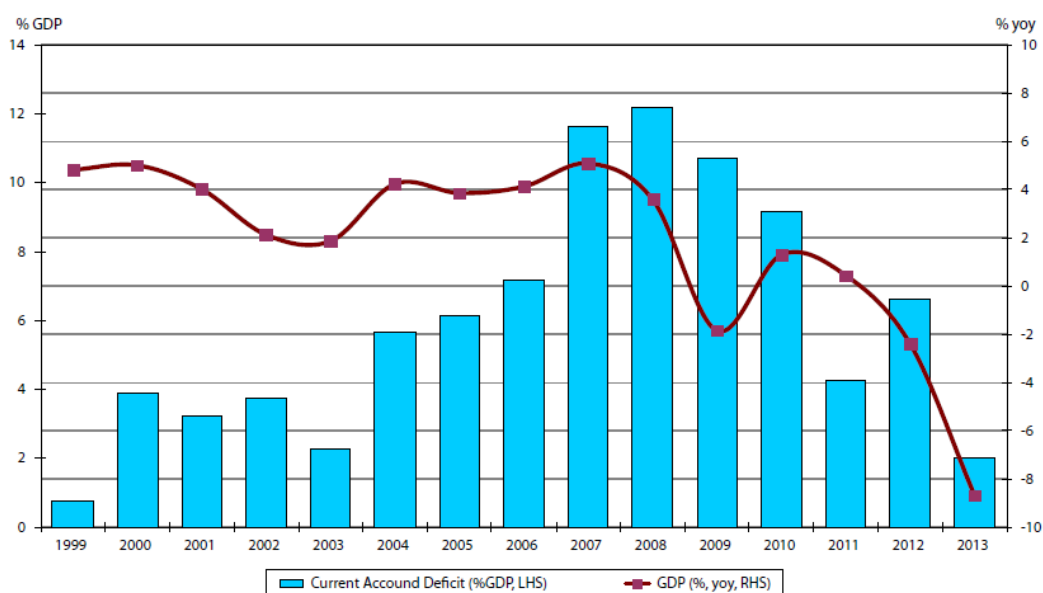
## Exhibit 1 - Descriptive of bail-in amounts

Table 3a. Bail-in amounts (€bn).

	BoC	Laiki	Total
Uninsured deposits	3.9	4.0	7.8
Senior debt	0.0	0.1	0.2
Subordinated debt	0.6	0.8	1.3
Total	4.5	4.9	9.4

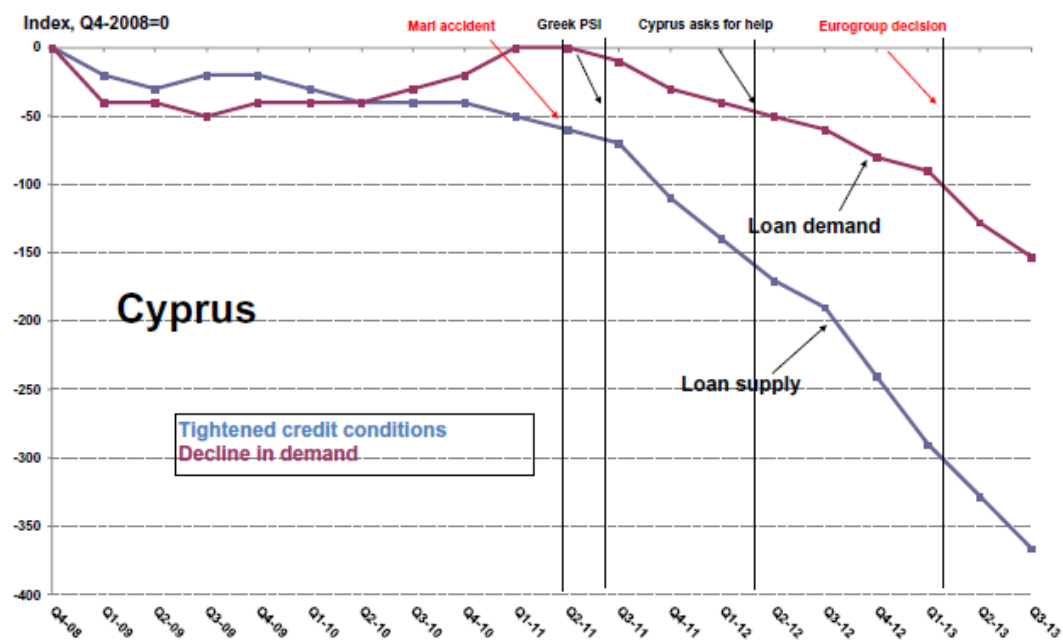
Source : IMF(2013), page 13, Central Bank of Cyprus, Eurobank Research

## Exhibit 2 - Economic growth and External Deficit



Source: Eurostat, Eurobank Research

### Exhibit 3 - Evolution of credit demand and supply



Source : ECB, Bank Lending Survey, Eurobank Research Calculations

## Exhibit 4– Cyprus Data on Banking Sector

<p>"No confidential information which competent authorities may receive in the course of their duties may be divulged to any person or authority whatsoever, except in summary or collective form, such that individual credit institutions cannot be identified, without prejudice to cases covered by criminal law. Accordingly, whenever the disclosure of aggregate statistical data would result in a breach of confidentiality as determined by the national competent authority, those data should not be disclosed."</p>			
<b>National Data on Banking Sector</b>	<b>CY</b>	<b>CY</b>	<b>CY</b>
	<b>31/12/2013</b>	<b>31/12/2012</b>	<b>31/12/2011</b>
	<b>€ '000</b>	<b>€ '000</b>	<b>€ '000</b>
Number	93 *	135 *	142 *
Total assets	78 836	110 542	111 734
Total assets per GDP	477.69%	618.01%	629.07%
<b>Number and size of foreign credit institutions in EU countries</b>			
From EEA countries	Number of branches	9	11
	Total assets of branches	5 012	2 342
	Number of subsidiaries	5	5
	Total assets of subsidiaries	10 705	19 528
From third countries	Number of branches	16	16
	Total assets of branches	5 214	7 230
	Number of subsidiaries	3	3
	Total assets of subsidiaries	9 283	15 173
<b>Total capital and capital requirements of credit institutions in EU</b>			
Total tier I capital as % of total capital	75.26%	95.07%	96.21%
Total tier II capital as % of total capital	5.16%	15.25%	9.72%
Total capital requirements	3 632	5 406	6 064
Total capital adequacy ratio	12.92%	5.95%	7.70%
<b>Number and size of investment firms in EU countries</b>			
Number	150 **	125	106 **
Total assets	2 855	2 701	2 067
Total assets per GDP	17.30%	15.10%	11.64%
<b>Total capital and capital requirements of investment firms in EU</b>			
Total tier I capital as % of total capital	97.46%	97.32%	95.90%
Total tier II capital as % of total capital	2.96%	3.68%	4.17%
Total capital requirements	1 366	1 334	914
Total capital adequacy ratio	15.31%	14.14%	19.50%

\* Number of credit institutions includes 100 Cooperative Credit Institutions, permanently affiliated, to the Cooperative

Central Bank Ltd which acts as a central body under article 3 of

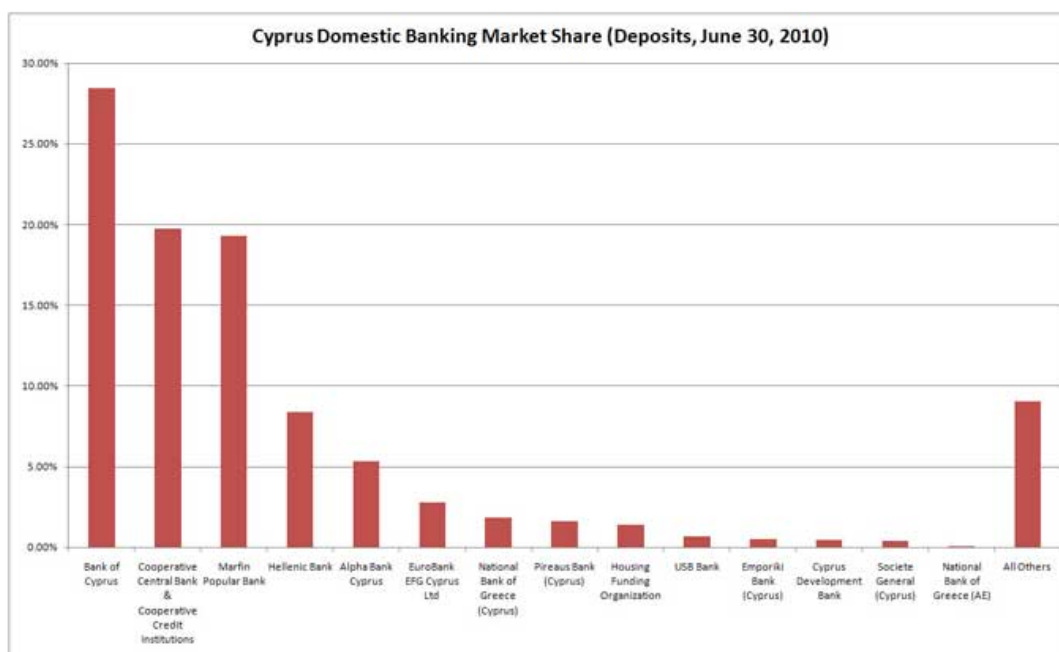
\*\* At 31/12/2011 106 CIFs were sending CRD calculations but the total number of authorised CIFs was

\*\*At 31/12/2013 146 CIFs were sending CRD calculations but the total number of authorised CIFs was  
12 CIFs didn't send CRD calculations as they didn't

(Please note that CIFs have 12 months from the date of their authorisation to

*Source: Central Bank of Cyprus*

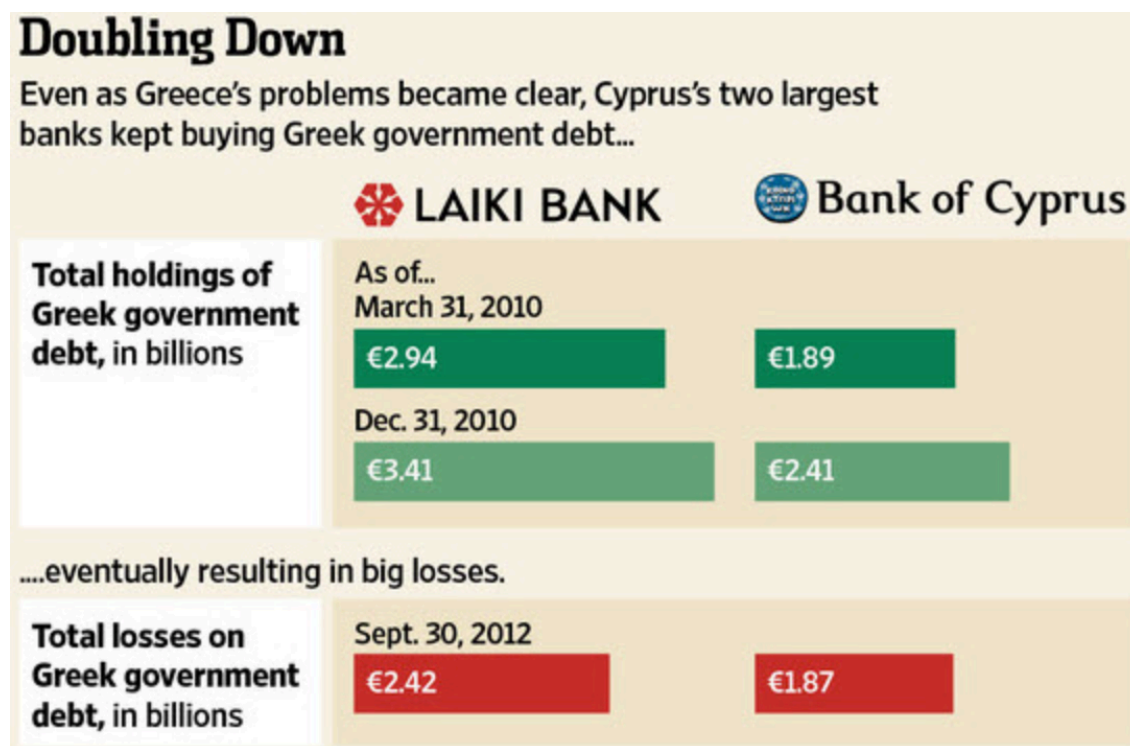
## Exhibit 5 – Cyprus Domestic Banking Market Share



Source: Central Bank of Cyprus

Source: Central Bank Of Cyprus

## Exhibit 6 - Greek Government Bonds holdings by Laiki Bank and Bank of Cyprus

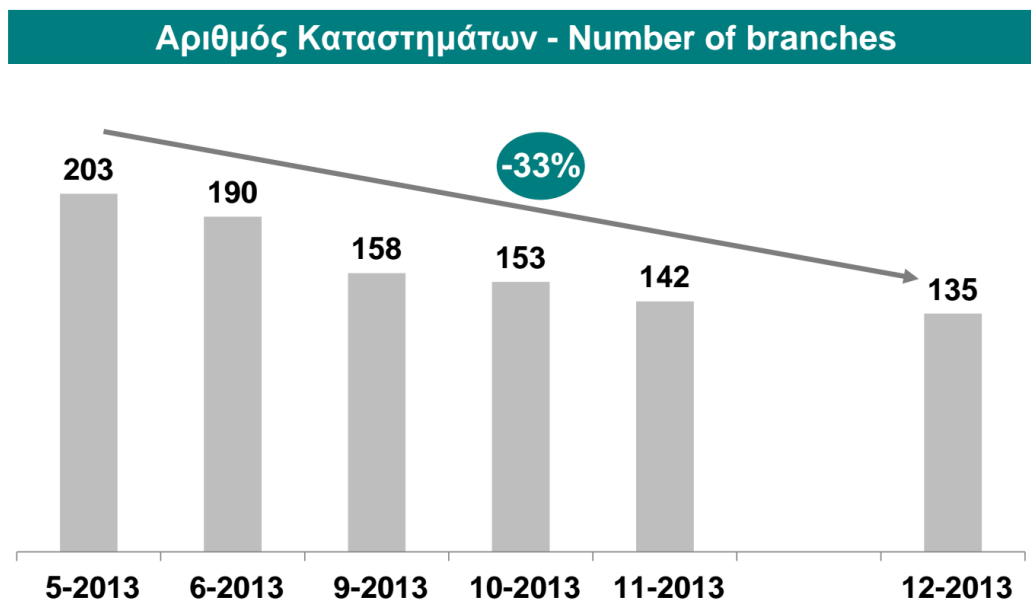


Source: <http://www.zerohedge.com/news/2013-03-28/collapse-cyprus-due-man>

**Exhibit 7 – Number of Branches Bank of Cyprus**

**Αναδιάρθρωση δραστηριοτήτων Κύπρου – Καταστήματα**  
**Restructuring of Cyprus Operations – Branches**

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*Source: Extraordinary General Meeting presentation, John Hourican, 28th August 2014*

## Exhibit 8 – John Hourican Executive Profile



### Executive Profile

#### John Patrick Hourican

Chief Executive Officer and Executive Director, [Bank of Cyprus Holdings Public Limited Company](#)

Age: 46 Total Calculated Compensation: €1,020,000 This person is connected to 1 Board Members in 1 different organizations across 5 different industries.

As of Fiscal Year 2015

[See Board Relationships](#)

### Background

Mr. John Patrick Hourican has been the Chief Executive Officer of Bank of Cyprus Holdings Public Limited Company (Also known as Bank of Cyprus Group) since November 1, 2013 and also has been its Executive Director since November 28, 2013. Mr. Hourican serves as the Chief Executive Officer and President of Central Bank of Cyprus. He served as the Chief Executive of Markets & International Banking at The Royal Bank of Scotland Group plc from January 2012 to February 28, ...

[Read Full Background](#)

### Corporate Headquarters

51 Stassinos Street  
Nicosia, -- 2002

Cyprus

Phone: 357 2 2122239

Fax: 357 2 2120245

### Board Members Memberships

2013-Present

Chief Executive Officer and Executive Director

[Bank of Cyprus Holdings Public Limited Company](#)

### Education

BA 1990

National University of Ireland, Galway

Postgraduate Diploma 1991

Dublin City University

### Other Affiliations

[RBS Holdings N.V.](#)

[The Royal Bank of Scotland Group plc](#)

[The Royal Bank of Scotland N.V.](#)

[Dublin City University](#)

[National University of Ireland, Galway](#)

[The Royal Bank of Scotland Limited](#)

[Central Bank of Cyprus](#)

### Annual Compensation

Salary	€910,000
<b>Total Annual Compensation</b>	<b>€910,000</b>

### Stocks Options

<b>All Other Compensation</b>	<b>€110,000</b>
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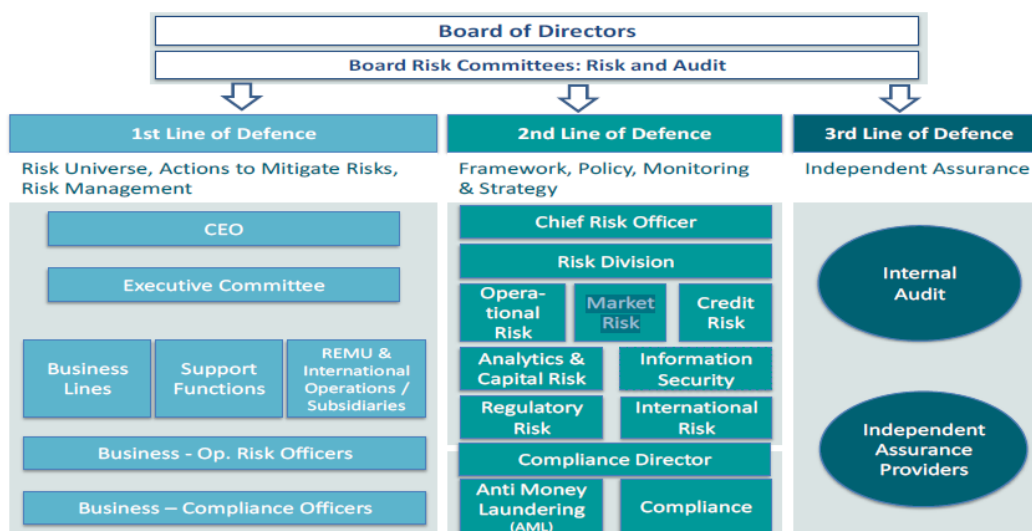
### Total Compensation

Total Annual Cash Compensation	€1,020,000
Total Short Term Compensation	€910,000
Other Long Term Compensation	€110,000
<b>Total Calculated Compensation</b>	<b>€1,020,000</b>

Source: Bloomberg



## Exhibit 9 – Risk Management Governance



The first line of defence against impending risks lies with line management. The second line of defence consists of the Risk Management and Compliance units of the Bank, which are responsible for developing and maintaining an effective risk and compliance framework to support management in the delivery of its business and strategic objectives. The third line of defence relates to Internal Audit and independent assurance providers.

The main role of the Risk departments assigned to the second line of defence is to provide the tools and methodologies for risk management to the business units, to promote risk awareness, to engage business units in identifying, measuring and mitigating risks as appropriate, to report the losses from risks identified to Executive Management and the Regulatory Authorities, to facilitate the collection and monitoring of Key Risk Indicators (KRIs), to identify risks at Group level in cases where these risks are not managed by a specific business unit and to make sure that actions mitigating risks are implemented.

*Source: BoC's 3 Pillar Disclosure 2013*

## Exhibit 10 – BoC Group's Liquidity Ratios

### Liquidity ratios

The ratio of liquid assets to total deposits and other liabilities falling due in the next twelve months is prepared monthly by MRM and monitored by ALCO. Liquid assets are defined as cash, interbank deposits maturing within thirty days and debt and equity securities at haircuts prescribed by the regulatory authorities. Total deposits comprise all customer deposits irrespective of maturity and other liabilities include all non-customer deposit liabilities due to be paid in the next twelve months.

The Group's liquidity ratio was as follows:

	2013	2012
	%	%
31 December	<b>12,28</b>	8,79
Average ratio	<b>11,16</b>	14,99
Highest ratio	<b>14,42</b>	23,93
Lowest ratio	<b>8,69</b>	7,08

The minimum liquidity ratios for Cyprus Operations as set by the CBC are 20% for Euro and 70% for foreign currencies.

During 2013, the liquidity ratio remained at low levels due to the continued economic crisis in Cyprus, the bail-in and the outflow of deposits.

The ratio of loans and advances to customer deposits is presented below:

	2013	2012
	%	%
31 December	<b>145,38</b>	85,70
Average ratio	<b>128,84</b>	91,65
Highest quarter ratio	<b>145,95</b>	93,85
Lowest quarter ratio	<b>85,70</b>	85,70

*Source: BoC's Annual Report of 2013*

## Exhibit 11 – BoC's credit risk exposure

The Company's maximum exposure to credit risk is analysed by geographic area as follows:

	2013	2012
<b>On-balance sheet</b>	€000	€000
Cyprus	24.242.750	17.759.915
Greece	209.969	8.157.046
United Kingdom	539.789	-
Romania	647.084	579.298
Russia	39.545	151.563
Ukraine	167.479	117.941
	<b>25.846.616</b>	<b>26.765.763</b>
<b>Off-balance sheet</b>		
Cyprus	3.657.120	2.514.044
Greece	335.073	1.563.889
Romania	3.466	23.349
	<b>3.995.659</b>	<b>4.101.282</b>
<b>Total on and off balance sheet</b>		
Cyprus	27.899.870	20.273.959
Greece	545.042	9.720.935
United Kingdom	539.789	-
Romania	650.550	602.647
Russia	39.545	151.563
Ukraine	167.479	117.941
	<b>29.842.275</b>	<b>30.867.045</b>

Source: BoC's Annual Report of 2013

## Exhibit 12 – BoC's quality of credit in 2012-2013

### Credit quality of loans and advances to customers (continued)

*Loans and advances to customers that are neither past due nor impaired*

The credit quality of loans and advances to customers that were neither past due nor impaired, is monitored by the Company using internal systems. The table below presents the credit risk quality of loans and advances to customers that were neither past due nor impaired.

	Grade 1	Grade 2	Grade 3	Total
2013	€000	€000	€000	€000
Cyprus	5.770.178	1.663.414	2.344.810	9.778.402
United Kingdom	195.791	6.652	2.858	205.301
Romania	71.500	97.600	24.861	193.961
Ukraine	-	-	340	340
	6.037.469	1.767.666	2.372.869	10.178.004

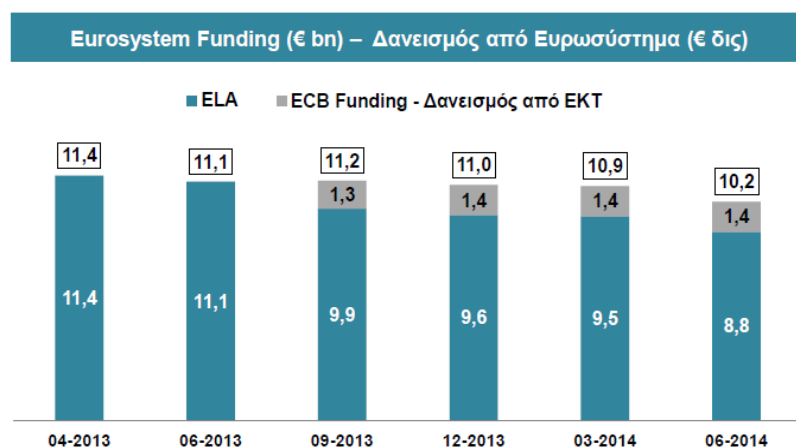
2012				
Cyprus	7.249.155	993.674	1.109.152	9.351.981
Greece	3.308.864	85.742	1.665.447	5.060.053
Romania	403.331	3.523	-	406.854
Russia	96.456	93	-	96.549
Ukraine	1	-	3.561	3.562
	11.057.807	1.083.032	2.778.160	14.918.999

*Loans and advances to customers that are past due but not impaired*

	2013	2012
Past due:	€000	€000
- up to 30 days	744.773	954.825
- 31 to 90 days	1.030.687	1.499.621
- 91 to 180 days	1.278.814	730.593
- 181 to 365 days	2.058.869	744.735
- over one year	1.314.784	976.631
	6.427.927	4.906.405

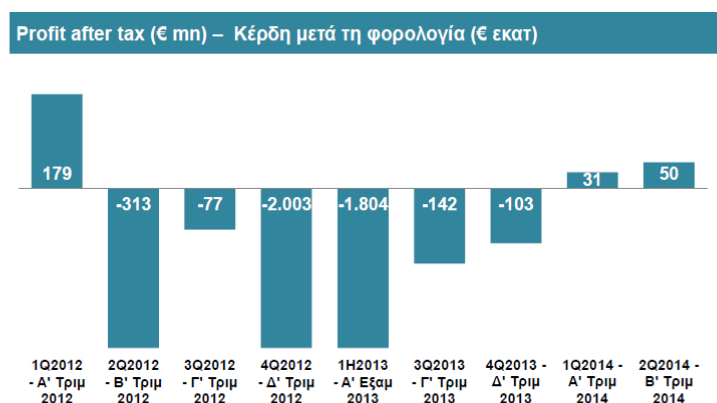
Source: *Annual Financial Report of Bank of Cyprus in 2013*

### Exhibit 13 – ELA/ECB funding (2013-2014)



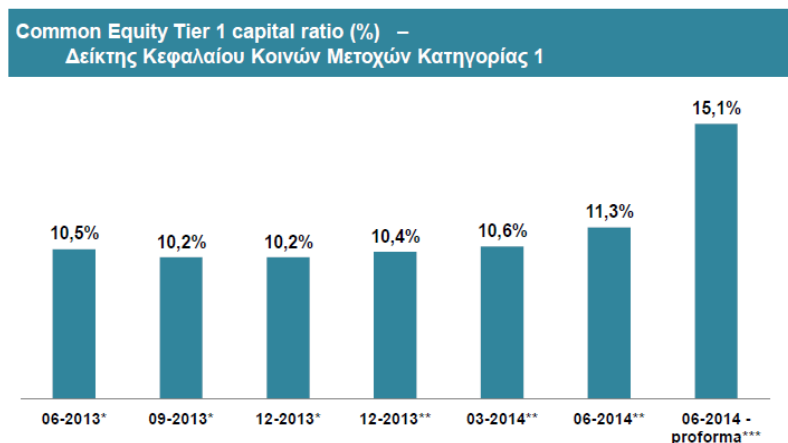
Source: Extraordinary General Meeting presentation, John Hourican, 28th August 2014

### Exhibit 14 – Profit After tax (2012-2014)



Source: Extraordinary General Meeting presentation, John Hourican, 28th August 2014

### Exhibit 15 – Common Equity Tier 1 Capital ratio (%) (2013-2014)



Source: Extraordinary General Meeting presentation, John Hourican, 28th August 2014

## Exhibit 16 – Greek government bonds’ impairments of Bank of Cyprus 2012-2013

### 15. Impairment of Greek Government Bonds

The Group has participated in the voluntary exchange of the Greek Government Bonds (GGBs) in the context of the PSI which was completed in March/April 2012, on the basis of the terms set out below:

- Write-off of 53,5% of the nominal value of the exchanged GGBs.
- Receive new GGBs with nominal value 31,5% of the exchanged GGBs, in an amortising structure, from 11 to 30 years (final maturity in 2042). The coupon of the new bonds was set at 2,00% for years 2013-2015, 3,00% for years 2016-2020, 3,65% for year 2021 and 4,30% thereafter (2022-2042).
- Immediate repayment of 15% of the nominal value of exchanged GGBs with short term securities issued by the European Financial Stability Facility (EFSF) with a 1-2 year maturity and bearing market interest rates.
- The payment of accrued interest through EFSF securities with a six-month maturity and bearing market interest rates.
- Receipt of detachable GDP-linked securities with a notional amount equal to the new GGBs of each holder. The securities provide for annual payments of up to 1% of their notional amount, commencing in 2015, in the event that Greek GDP growth exceeds certain thresholds.

The nominal value of the GGBs after the PSI exchange was follows:

	Nominal value
	€000
1 January 2012	2.087.824
Nominal value adjustment of GGBs (arising on inflation-linked GGBs)	162.609
Adjusted nominal value of GGBs on PSI exchange date	<b>2.250.433</b>
New GGBs arising after the exchange (31,5% of nominal value of old GGBs)	<b>708.887</b>

The new GGBs were valued at fair value on the PSI exchange date with an average price of 21% of their nominal value, based on the settlement price of credit default swaps for GGBs at the relevant auction. The new GGBs were classified in the available-for-sale category.

### 15. Impairment of Greek Government Bonds (continued)

The carrying value of the GGBs is as follows:

	Carrying value
	€000
1 January 2012	615.661
Exchange of old GGBs with EFSF bonds (15,0% of nominal value of the old GGBs plus accrued interest)	(355.905)
Loss on initial recognition of the new GGBs	(109.308)
New GGBs arising after the exchange	<b>150.448</b>

The detachable GDP-linked securities were measured on initial recognition at their fair value which was nil.

The impairment of GGBs and the change in fair value of related hedging instruments recorded in the consolidated income statement is as follows:

	2012	2011
	€000	€000
Impairment charge on old GGBs	-	1.365.615
Loss on initial recognition of new GGBs	<b>109.308</b>	-
Change in fair value of related hedging instruments	<b>34.265</b>	363.646
Total impairment charge per the consolidated income statement	<b>143.573</b>	1.729.261

The derivatives were used to hedge the interest rate risk of the GGBs and have been terminated during 2012.

In December 2012 the Group participated in the voluntary repurchase of new GGBs by the Greek Republic. As a result, the Group disposed all its GGBs and realised a gain of €96.515 thousand (Note 9).

*Source: Annual Financial Report of Bank of Cyprus in 2012*

## Exhibit 17 – Key Balance Sheet Figures and ratios

Key Balance Sheet figures and ratios	31 December 2013	31 December 2012	Annual charge ±%
Gross loans (€ bn)	<b>26,7</b>	28,1	-5%
Customer Deposits (€ bn)	<b>15,0</b>	28,4	-47%
Loans to deposits ratio	<b>145%</b>	86%	+59 p.p.*
90+ DPD ratio	<b>49%</b>	27%	+22 p.p.*
<b>Capital</b>			
Core tier 1 capital ratio	<b>10,2%</b>	-1,9%	+12,1 p.p.*
Tier 1 capital ratio	<b>10,2%</b>	0,6%	+9,6 p.p.*
Total capital ratio	<b>10,5%</b>	0,9%	+9,6 p.p.*
Risk weighted assets (€ bn)	<b>22,4</b>	21,6	+4%

\*p.p.= percentage points, 1 percentage point = 1%

*Source: Annual Financial Report Bank of Cyprus in 2013*

**Exhibit 18 – BoC's Balance Sheet (2012-2014)**

<b>BoC Balance Sheet</b>			
	<b>2014</b>	<b>2013</b>	<b>2012</b>
<b>Assets</b>	€000	€000	€000
Cash and balances with central Banks	668 292	550 740	1 272 424
Placements with banks	1 462 824	1 064 654	1 768 836
Derivative financial assets	62 585	28 723	26 794
Investments	1 831 297	2 722 328	1 135 333
Investments pledged as collateral	669 786	672 809	734 747
Loans and advances to costumers	17 329 208	19 714 705	24 374 531
Balances with group companies	809 959	1 115 708	
Other assets	182 574	249 399	1 112 623
Property and equipment	221 106	243 908	483 193
Investment Properties	250 888	198 629	
intangible assets	13 105	16 975	123 555
Investments in associates and joint ventures	102 615	204 777	
Investments in group companies	236 369	442 335	
Deferred tax assets	456 479	456 479	
Non-current assets held for sale	114 060		
<b>Total assets</b>	<b>24 411 147</b>	<b>27 682 169</b>	<b>31 032 036</b>
<b>Liabilities</b>			
Amounts due to banks	159 765	124 152	341 044
Funding from central banks	8 283 773	10 956 277	
Repurchase agreements	579 682	594 004	607 773
Derivative financial liabilities	71 761	83 957	183 826
Customer deposits	11 329 157	12 745 743	28 442 152
Balances with group companies	550 683	563 579	
Other liabilities	283 735	132 966	1 076 767
Debt securities in issue	693	674	44 775
Deferred tax liabilities	23 219	21 983	
<b>Total liabilities</b>	<b>21 282 468</b>	<b>25 223 335</b>	<b>30 696 337</b>
<b>Equity</b>			
Share capital	892 238	4 683 985	1 795 141
Share premium	551 289		428 271
Capital reduction reserve	1 952 486		428 835
Shares subject to interim orders	441	58 922	
Revaluation and other reserves	5 506	43 086	106 336
Accumulated losses	-273 281	-2 327 159	-2 500 106
<b>Total equity</b>	<b>3 128 679</b>	<b>2 458 834</b>	<b>335 699</b>
<b>Total liabilities and equity</b>	<b>24 411 147</b>	<b>27 682 169</b>	<b>31 032 036</b>

*Source: Annual Financial Reports of Bank of Cyprus in 2012 and 2014*



**Exhibit 19 – BoC's Income Statement (2012-2014)**

<b>BoC Income Statement</b>			
	<b>2014</b>	<b>2013</b>	<b>2012</b>
	€000	€000	€000
<b>Continuing Operations</b>			
Turnover	1 513 037	1 552 541	2 428 817
Interest Income	1 383 355	1 416 319	1 992 228
Interest Expense	-374 057	-533 985	-981 110
<b>Net Interest Income</b>	<b>1 009 298</b>	<b>882 334</b>	<b>1 011 118</b>
Fee and comission income	143 596	141 051	238 253
Fee and comission expense	-7 838	-18 941	-19 486
Net foreign exchange losses/gains	-9 547	15 319	27 789
Dividends from subsidiary companies	16 850	25 532	
Net gains on financial instrument transactions and disposal of subsidiaries	211 319	36 941	55 293
Other Income/Expenses	-19 591	-14 384	44 164
	<b>1 344 087</b>	<b>1 067 852</b>	<b>1 357 131</b>
Staff costs	-203 844	-348 695	-408 347
Other operating expenses	-196 740	-179 208	-349 470
Profit before impairment of loans and advances to customers and other	943 503	539 949	599 314
Provisions for impairment of loans and advances to customers and other customers	-728 448	-929 635	-2 306 157
Impairment of other financial instruments	-253 139	-50 546	
Impairment of goodwill and intangible assets			-359 746
Impairment of GGBs and change in fair value of related hedging derivatives			-143 573
Impairment of non-financial instruments	-252 130	-313 006	
<b>Loss before share of profit of associates</b>	<b>-290 214</b>	<b>-753 238</b>	<b>-2 210 162</b>
Share of profit/loss of associates			222
<b>Loss before tax from continuing operations</b>	<b>-290 214</b>	<b>-753 238</b>	<b>-2 209 940</b>
Tax	-357	4 911	-13 079
<b>Loss after tax from continuing operations</b>	<b>-290 571</b>	<b>-748 327</b>	<b>-2 223 019</b>
<b>Discontinued operations</b>			
Profit/loss after tax from discontinued operations	36 000	-1 327 603	
<b>Loss for the year</b>	<b>-254 571</b>	<b>-2 075 930</b>	<b>-2 223 019</b>

*Source: Annual Financial Reports of Bank of Cyprus in 2012 and 2014*

**Exhibit 20 – BoC’s Cash Flows Statement (2013-2014)**

<b>BoC Cash Flows Statement</b>		
	<b>2014</b>	<b>2013</b>
	€000	€000
<b>Net cash flow/(used in) operating activities</b>	<b>1 277 232</b>	<b>-3 078 013</b>
<b>Cash flows from investing activities</b>		
Proceeds on disposal/redemption of investments:		
-debt securities	1 045 820	1 047 598
-equity securities	88 541	22 465
Interest received from debt securities and treasury bills	42 147	219 044
Dividend income received	17 040	25 862
Cash consideration paid net of cash acquired	-520	1 126 302
Proceeds/(amounts paid) on disposal of subsidiary companies and operations	98 860	-1 140 984
Purchase of property and equipment	-2 074	-6 203
Proceeds on disposal of property and equipment and intangible assets	1 611	2 152
Purchase of intangible assets	-4 399	-2 751
Proceeds on disposal of investment properties and investment properties held for sale	454	
<b>Net cash flow from investing activities</b>	<b>1 287 480</b>	<b>1 293 485</b>
<b>Cash flow from financing activities</b>		
Proceeds from the issue of shares	894 000	
Share issue costs paid	-29 620	
(Net repayment of)/ proceeds from funding from central banks	-2 672 504	1 853 749
Interest on subordinated loan stock		4 442
Interest on funding from central banks	-138 643	-167 560
<b>Net cash flow (used in)/from financing activities</b>	<b>-1 946 767</b>	<b>1 690 631</b>
<b>Net increase/ (decrease) in cash and cash equivalents for the year</b>	<b>617 945</b>	<b>-93 897</b>
<b>Cash and cash equivalents</b>		
1 January	900 181	993 410
Foreign exchange adjustments	-31 518	668
Net increase/ (decrease) in cash and cash equivalents for the year	617 945	-93 897
<b>31 December</b>	<b>1 486 608</b>	<b>900 181</b>

*Source: Annual Financial Report of Bank of Cyprus in 2014*

**Exhibit 21 – BoC’s Interim Income Statement (30 June 2014)**

<b>BoC Income Statement</b>	
	<b>30/06/2014</b>
	€000
<b>Continuing Operations</b>	
Turnover	969 243
Interest Income	786 044
Interest Expense	-240 076
<b>Net Interest Income</b>	<b>545 968</b>
Fee and comission income	93 304
Fee and comission expense	-5 526
Net foreign exchange losses/gains	-2 379
Dividends from subsidiary companies	
Net gains on financial instrument transactions and disposal of subsidiaries	160 523
Other Income/Expenses	32 650
	<b>824 540</b>
Staff costs	-135 398
Other operating expenses	-130 769
Profit before impairment of loans and advances to customers and other impairments	558 373
Provisions for impairment of loans and advances to customers and other customers credit losses	-329 120
<b>Loss before share of profit of associates</b>	<b>229 253</b>
Share of profit/loss of associates	4 111
<b>Loss before tax from continuing operations</b>	<b>233 364</b>
Tax	-9 591
<b>Loss after tax from continuing operations</b>	<b>223 773</b>
<b>Discontinued operations</b>	
Profit/loss after tax from discontinued operations	-150 215
<b>Profit/Loss for the period</b>	<b>73 558</b>

*Source: Interim Financial Report of Bank of Cyprus in 2014*

**Exhibit 22 – BoC's Interim Balance Sheet (30 June 2014)**

<b>BoC's Balance Sheet</b>	
	<b>30/06/14</b>
<b>Assets</b>	€000
Cash and balances with central Banks	859 438
Placements with banks	1 114 448
Investments	2 866 059
Investments pledged as collateral	671 984
Derivative financial assets	5 949
Loans and advances to costumers	20 063 034
Balances with group companies	
Life insurance business assets atributable to policyholders	460 366
Property and equipment	366 385
Investment Properties	
Investments in group companies	
Deferred tax assets	
Intangible assets	135 107
Assets held for sale	391 783
Other assets	1 414 672
Investments in associates and joint ventures	208 939
<b>Total assets</b>	<b>28 558 164</b>
<b>Liabilities</b>	
Amounts due to banks	219 186
Funding from central banks	10 184 574
Repurchase agreements	582 646
Derivative financial liabilities	82 496
Customer deposits	13 802 750
Insurance Liabilities	574 966
Debt securities in issue	4 919
Other liabilities	287 984
Subordinated loan stock	4 718
<b>Total liabilities</b>	<b>25 744 239</b>
<b>Equity</b>	
Share capital	4 755 711
Shares subject to interim orders	297
Revaluation and other reserves	79 178
Accumulated losses	-2 086 954
Non-controlling interests	65 693
<b>Total equity</b>	<b>2 813 925</b>
<b>Total liabilities and equity</b>	<b>28 558 164</b>

Source: *Interim Financial Report of Bank of Cyprus in 2014*

## Exhibit 23 – Staff Costs (2012-2013)

### 13. Staff costs

	2013	2012 (restated)
	€000	€000
Salaries	255.961	245.306
Employer's contributions to state social insurance and pension funds	40.807	39.672
Retirement benefit plan costs	25.440	8.150
	322.208	293.128
Voluntary retirement schemes (VRS)	120.589	65
Restructuring costs – VRS in Greece	-	363
	442.797	293.556

The number of persons employed by the Group as at 31 December 2013 was 7.752 (2012: 10.772).

In January and August 2013 the Group proceeded with a Voluntary Retirement Scheme (VRS) for its employees in Cyprus, the cost of which is included in staff costs and amounted to €120.589 thousand.

#### Retirement benefit plan costs

In addition to the employer's contributions to state social insurance and pension funds, the Group operates plans for the provision of additional retirement benefits as described below:

	2013	2012
	€000	€000
Effect of termination of defined benefit plans	-	(16.697)
Defined benefit plans	(1.587)	300
Defined contribution plans	27.027	24.547
	25.440	8.150

#### Cyprus

The main retirement plan for the Group's permanent employees in Cyprus (52% of total Group employees) is a defined contribution plan with effect from 1 January 2012. This plan provides for employer contributions of 14% and employee contributions of 3%-10% of the employees' gross salaries.

The defined contribution plan replaced the defined benefit plan which was in effect until 31 December 2011, which provided for a lump sum payment on retirement or death in service of up to 78 average monthly salaries depending on the length of service. This plan is managed by a Committee appointed by the members.

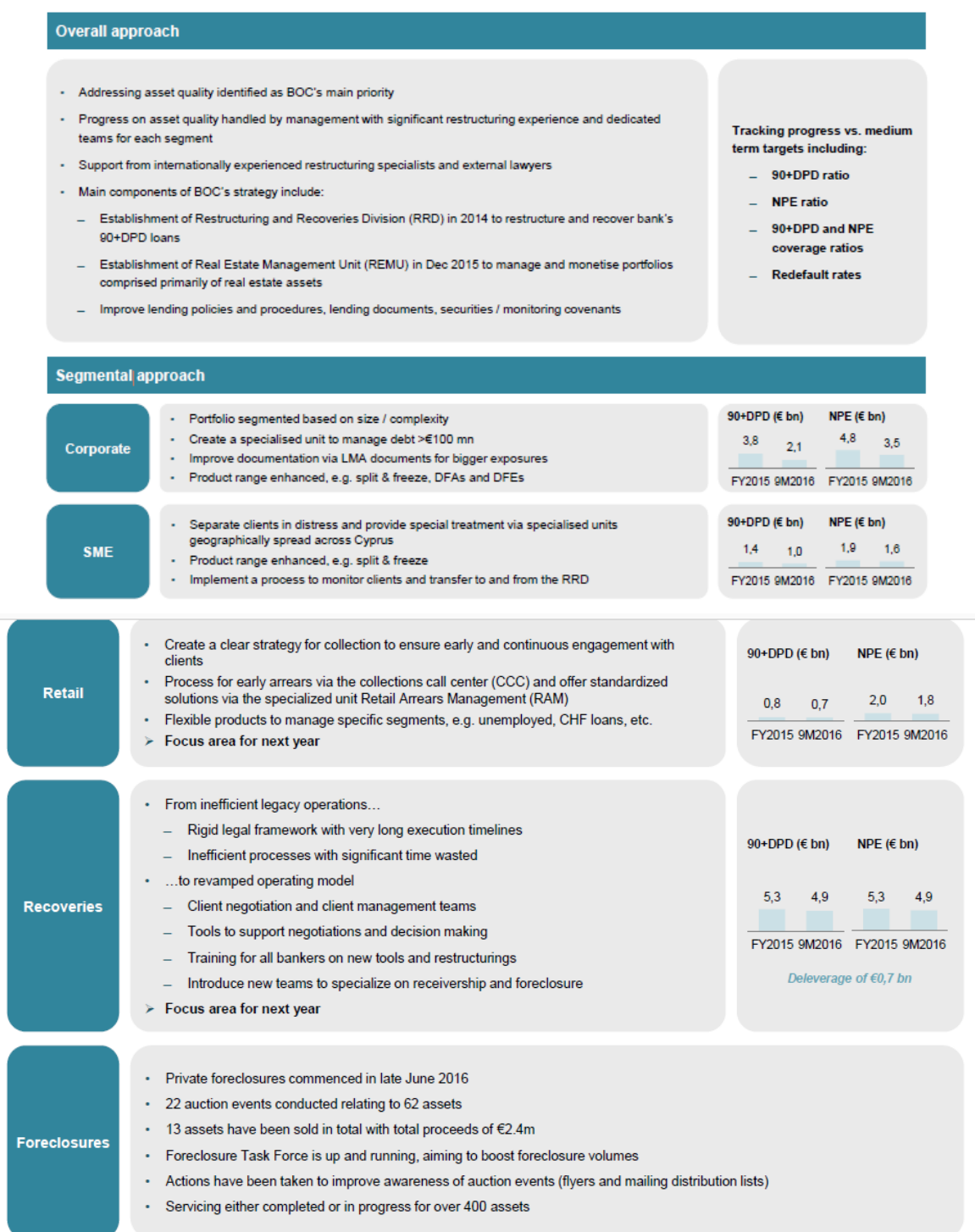
A small number of employees who do not participate in the main retirement plan, are members of a pension scheme that is closed to new entrants and may receive part or all of their retirement benefit entitlement by way of a pension for life. This plan is managed by an Administrative Committee composed of representatives of both the members and the employer.

A small number of employees of Group subsidiaries in Cyprus are also members of defined benefit plans. These plans are funded, with assets backing the obligations held in separate legal vehicles.

*Source: Annual Financial Report of Bank of Cyprus in 2013*

## Exhibit 24 – Clients' Segments

### Comprehensive strategy across segments adopted to tackle problem loans (1/2)



Source: [www.bankofcyprus.com](http://www.bankofcyprus.com)

## Exhibit 25 – Restructuring Plan’s actions

The restructuring plan focused on four major actions, namely:

- The sale of subsidiaries: given the capital needs and after the review of strategic alternatives the group decided to sale some of its subsidiaries and decrease its exposure in multiple geographies.
- Merge with the Cyprus Popular Bank and acquisition of certain of its operations: the insured deposits as well as the loans and the majority of Laiki Bank were acquired by BoC. As a result, all Laiki’s customers and employees were transferred to the biggest lender in Cyprus.
- The sale of operations of the Group in Greece to Piraeus Bank: on 26 March 2013, the bank sold the deposits, the fixed assets and the loans of the banking and leasing operations in Greece to Piraeus Bank. Due to the discontinuation of the operations and disposal of its branches in Greece, the BoC posted a net loss of €1.94 billion.
- Changes in the Governance of the Bank: on 29 March 2013, all the member of the Board of Directors resigned collectively as well as the CEO and the Deputy CEO. On October 2013, John Hourican was nominated as new CEO and the Board believed that “the new CEO is a key step in the implementation of the restructuring development of the bank’s activities”.

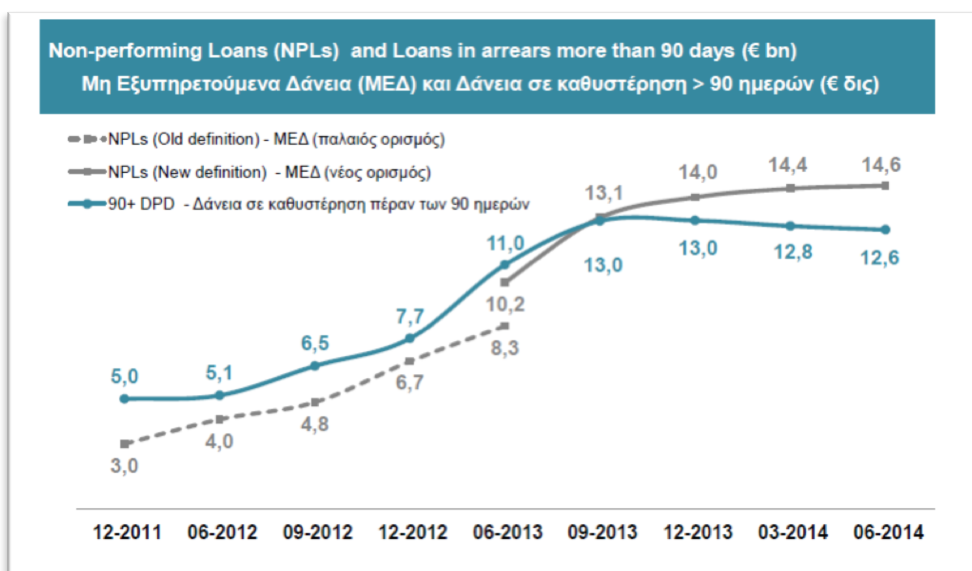
*Source: Annual Financial Report of the Bank of Cyprus in 2014*

## Exhibit 26 – Description of Debt securities

<i>Debt securities</i>	(€ '000)	Interest Rate	Frequency of coupon payments	Maturity	Issue Date	Credit Rating by Moody's
1. Short-term commercial paper	1 000 000	N/A	N/A	364 days	31/12/13	N/A
2. Covered Bonds	1 000 000	3,53%	Quarterly	12/06/17	31/12/11	B1
3. Bonds guaranteed by government	1 000 000	5%	Annually	01/11/14	01/11/12	B1
4. Other	1 919 000					N/A
<b>Total</b>	<b>4 919 000</b>					

*Source: Annual Financial Report of Bank of Cyprus in 2013*

## Exhibit 27 – Non-Performing Loans volume (€bn) (2011-2014)



Source: Extraordinary General Meeting presentation, John Hourican, 28th August 2014

## Exhibit 28 – Non-Performing Loans detailed information 2013

Breakdown of New definition Non-performing loans	31 December 2013	
	€ million	% of gross loans
Loans restructured and less than 90 days past due	1.682	6%
Loans more than 90 days past due or loans restructured and more than 90 days past due	12.360	47%
<b>Non-performing loans</b>	<b>14.042</b>	<b>53%</b>

Source: Annual Financial Report of Bank of Cyprus in 2013



# Exhibit 28 – Non-Performing Loans detailed information 2013 (cont.)

The analysis of non performing loans is presented below:

2013	Total loans and advances	Performing loans and advances			Non – performing credit facilities
		Not restructured loans and advances €000	Restructured loans and advances €000	Total €000	
<b>Corporate legal entities</b>	<b>15,266,211</b>	<b>4,203,625</b>	<b>1,557,962</b>	<b>5,761,587</b>	<b>9,504,624</b>
Construction	3,907,906	549,941	367,869	917,810	2,990,096
Real estate activities	3,593,805	929,725	493,858	1,423,583	2,170,222
Wholesale and retail trade: repair of motor vehicles and motorcycles	2,137,664	845,171	192,590	1,037,761	1,099,903
Accommodation and food service activities	1,690,995	512,491	159,310	671,801	1,019,194
Electricity, gas, steam and air-conditioning supply	42,834	33,786	6,068	39,854	2,980
All other sectors	3,893,007	1,332,511	338,267	1,670,778	2,222,229
<b>Retail legal entities</b>	<b>2,213,934</b>	<b>1,100,741</b>	<b>160,552</b>	<b>1,261,293</b>	<b>952,641</b>
Wholesale and retail trade: Repair of motor vehicles and motorcycles	578,497	301,280	40,016	341,296	237,201
Real estate activities	440,719	266,185	34,319	300,504	140,215
Construction	289,686	81,568	32,430	113,998	175,688
Manufacturing	219,216	100,393	14,655	115,048	104,168
Service activities	128,116	82,825	5,030	87,855	40,261
All other sectors	557,700	268,490	34,102	302,592	255,108
<b>Private individuals</b>	<b>9,263,175</b>	<b>4,381,322</b>	<b>1,297,049</b>	<b>5,678,371</b>	<b>3,584,804</b>
Credit facilities for the purchase/construction of immovable property:	5,838,484	2,891,360	1,039,616	3,930,976	1,907,508
a) Owner occupied	3,327,578	1,695,059	623,521	2,318,580	1,008,998
b) For other purposes	2,510,906	1,196,301	416,095	1,612,396	898,510
Consumer loans	2,193,821	793,097	205,706	998,803	1,195,018
Credit cards	276,201	198,150	376	198,526	77,675
Current accounts	361,555	207,226	1,039	208,265	153,290
Credit facilities to sole traders	593,114	291,489	50,312	341,801	251,313
<b>Total credit facilities</b>	<b>26,743,320</b>	<b>9,685,688</b>	<b>3,015,563</b>	<b>12,701,251</b>	<b>14,042,069</b>
<b>Provisions for impairment and fair value adjustment on initial recognition</b>	<b>4,978,981</b>	<b>432,747</b>	<b>100,372</b>	<b>*533,119</b>	<b>4,445,862</b>

\* The provisions for impairment and fair value adjustment on initial recognition for performing loans, relate to collective provision and fair value adjustment on initial recognition of loans following Laiki acquisition.

Source: Annual Financial Report of Bank of Cyprus in 2013

## Exhibit 29 – Non-Performing Loans detailed information June 2014

### Credit risk (continued)

#### Non-performing loans analysis (continued)

The analysis of non performing loans for 30 June 2014 and 31 December 2013 is presented below:

30 June 2014	Total loans and advances €000	Performing loans and advances			Non-performing credit facilities €000
		Not restructured loans and advances €000	Restructured loans and advances €000	Total €000	
<b>Corporate legal entities</b>	<b>13,830,296</b>	<b>3,318,694</b>	<b>1,102,015</b>	<b>4,420,709</b>	<b>9,409,587</b>
Construction	3,713,386	388,945	185,259	574,204	3,139,182
Real estate activities	2,838,307	714,955	284,932	999,887	1,838,420
Wholesale and retail trade	1,961,703	713,270	154,396	867,666	1,094,037
Accommodation and food service activities	1,583,047	368,912	156,417	525,329	1,057,718
Electricity, gas, steam and air-conditioning supply	34,692	31,352	1,106	32,458	2,234
All other sectors	3,699,161	1,101,260	319,905	1,421,165	2,277,996
<b>Retail legal entities</b>	<b>2,542,119</b>	<b>1,092,818</b>	<b>184,731</b>	<b>1,277,549</b>	<b>1,264,570</b>
Wholesale and retail trade	641,431	305,090	41,069	346,159	295,272
Real estate activities	577,463	281,853	45,142	326,995	250,468
Construction	379,957	84,446	36,660	121,106	258,851
Manufacturing	218,065	88,178	17,197	105,375	112,690
Service activities	185,066	99,714	7,379	107,093	77,973
All other sectors	540,137	233,537	37,284	270,821	269,316
<b>Private individuals</b>	<b>8,927,133</b>	<b>3,976,285</b>	<b>1,043,564</b>	<b>5,019,849</b>	<b>3,907,284</b>
Credit facilities for the purchase/construction of immovable property:	5,741,671	2,724,806	848,208	3,573,014	2,168,657
a) Owner occupied	3,284,239	1,620,581	505,654	2,126,235	1,158,004
b) For other purposes	2,457,432	1,104,225	342,554	1,446,779	1,010,653
Consumer loans	1,937,020	627,905	152,084	779,989	1,157,031
Credit cards	258,850	179,612	596	180,208	78,642
Current accounts	326,385	174,556	392	174,948	151,437
Credit facilities to sole traders	663,207	269,406	42,284	311,690	351,517
<b>Total credit facilities</b>	<b>25,299,548</b>	<b>8,387,797</b>	<b>2,330,310</b>	<b>10,718,107</b>	<b>14,581,441</b>
<b>Provisions for impairment and fair value adjustment on initial recognition</b>	<b>4,878,591</b>	<b>314,143</b>	<b>54,726</b>	<b>*368,869</b>	<b>4,509,722</b>

Note: Amounts shown in the table above include loans and advances classified as held for sale.

Source: Interim Financial Report of Bank of Cyprus in 2014

## Appendix - Teaching Notes

### Exhibit 1 (TN1) – Key ratios in 2011-2014

Table 1 - Ratios Computation

Ratios	2014	2013	2012	2011
<i>Impairments on GGBs to total impairments and provisions</i>			5,11%	80,2%
<i>Impairments on GGBs to profit/loss before tax</i>			6,50%	#####
<i>Deposits/Total Liabilities</i>	53,23%	50,53%	92,66%	84,41%
<i>NPL/Gross loans</i>	63%	53%		
<i>Loan/Deposits</i>	1,53	1,55	0,86	0,92
<i>Risk Weighted Assets(credit risk)/ Loans and Advances to customers</i>			1,03	0,79
			0,79	0,82

### Exhibit 2 (TN2) – NPLs' ratio analysis

Table 2 - Balance sheet data and NPLs' ratio computation

Captions (values in thousands)	31/12/14	31/06/2014	2013
<i>NPL</i>	14 960 849 €	14 042 069 €	14 042 069 €
<i>Provisions on NPLs</i>	3 071 954 €	3 071 954 €	3 076 270 €
<i>Total Loans</i>	23 772 112 €	20 063 034 €	26 743 320 €
<i>Total Debt</i>	23 308 000 €	25 744 239 €	27 612 000 €
<i>Total Assets</i>	26 789 000 €	28 558 164 €	30 349 000 €
<i>Total Equity</i>	3 466 000 €	2 813 925 €	2 663 000 €
<b>Ratios</b>			
<i>NPL/ Total debt</i>	0,642	0,545	0,509
<i>NPL/ Total Loans</i>	0,629	0,700	0,525
<i>NPL/Total Assets</i>	0,558	0,492	0,463
<i>NPL/Equity</i>	4,316	4,990	5,273
<i>Other loans/ Total Debt</i>	0,378	0,234	0,460

### Exhibit 3 (TN3) – Accounting Separation Good Bank/Bad Bank

#### i) BoC's resumed interim Balance Sheet (30/06/2014)

BoC			
Assets		Equity + Debt	
Current Assets	5 978 244,00 €	Equity	2 813 925,00 €
NPLs	11 563 366,53 €	Customer Deposits	13 802 750,00 €
Other gross loans	8 499 667,47 €	Other Senior liabilities	10 403 760,00 €
Other assets	2 516 886,00 €	Subordinated liabilities	674 779,00 €
		Other liabilities	862 950,00 €
<b>Total</b>	<b>28 558 164,00 €</b>	<b>Total</b>	<b>28 558 164,00 €</b>

*Values in thousands €*

#### ii) Option 1 – Separation of Assets and Liabilities

Good Bank			
Assets		Equity + Debt	
Current Assets	5 978 244,00 €	Customer Deposits	13 802 750,00 €
Other gross loans	8 499 667,47 €	Other Senior liabilities	3 192 047,47 €
Other assets	2 516 886,00 €		
<b>Total</b>	<b>16 994 797,47 €</b>	<b>Total</b>	<b>16 994 797,47 €</b>

Bad Bank			
Assets		Equity + Debt	
NPLs	11 563 366,53 €	Other Senior liabilities	7 211 712,53 €
		Subordinated liabilities	674 779,00 €
		Other liabilities	862 950,00 €
		Equity	2 813 925,00 €
<b>Total</b>	<b>11 563 366,53 €</b>	<b>Total</b>	<b>11 563 366,53 €</b>

*Values in thousands*

### iii) Option 2 – Separation of Assets and Liabilities

Good Bank			
Assets		Equity + Debt	
Current Assets	5 978 244,00 €	Customer Deposits	13 802 750,00 €
Other gross loans	8 499 667,47 €	Other Senior Liabilities	3 192 047,47 €
Other assets	2 516 886,00 €		
<b>Total</b>	<b>16 994 797,47 €</b>	<b>Total</b>	<b>16 994 797,47 €</b>

Bad Bank			
Assets		Equity + Debt	
NPLs	11 563 366,53 €	New Capital	11 563 366,53 €
<b>Total</b>	<b>11 563 366,53 €</b>	<b>Total</b>	<b>11 563 366,53 €</b>

*Values in thousands*

### Exhibit 4 (TN4) – Yield and Price of Bonds computation

<i>Debt Securities (values in thousands)</i>	<b>Interest payment</b>	<b>Bond Price</b>	<b>Yield</b>
2. Covered Bonds	8 835,00 €	766 024,01 €	4,92%
3. Bonds guaranteed by government	50 000,00 €	1 000 000,00 €	5,00%

$$\text{Interest Payment} = F \times \frac{i}{k}$$

$$\text{Yield} = \frac{C + \frac{F - P}{t}}{\frac{F + P}{2}}$$

$$\text{Bond Price} = C \times \left[ \frac{1 - \frac{1}{(1+i)^t}}{r} + \frac{F}{(1+i)^t} \right]$$

F= Face Value
i= Annual Interest rate
k= frequency of interest payments
C = Interest Payment
t= years to maturity

### Exhibit 5 (TN5) – Cost of Debt computation (%)

Table 3 - Debt Securities' key data

Debt Securities	Yield- to-Maturity (B1)	Cost of Debt (B1)	Yield- to-Maturity (Baa)	Cost of debt(Baa)
2. Covered Bonds	4,92%	4,30%	4,58%	4,00%
3. Bonds guaranteed by government	5,00%	4,37%	4,73%	4,13%

$$\text{Cost of Debt} = \text{YTM} \times (1 - 12.6\%)$$

Table 4 - Cost of Debt

	Cost of Debt (Values in thousands €)			
	Separation	Non-Separation	Separation	Non-Separation
2. Covered Bonds	4,00%	4,30%	40 029,20 €	43 032,50 €
3. Bonds guaranteed by government	4,25%	4,37%	42 520,10 €	43 700,00 €
<b>TOTAL</b>			<b>82 549,30 €</b>	<b>86 732,50 €</b>

Note 1: In option 2 (Separation), all covered bonds and 50% of government bonds have a cost of debt computed in the table before for the rating Baa. The rest of bonds and the bonds of option 1 (Non-separation) have the cost of debt correspondent to rating B1, once they are junk bonds.

Note 2: Yield-to-Maturity (Baa) obtained in <https://fred.stlouisfed.org/series/DBAA>.

### Exhibit 6 (TN6) – Risk Weighted assets

Risk Weighted Assets	
<b>BoC 2013</b>	23 529 603,00 €
<b>Bad bank</b>	14 445 430,11 €
<b>BoC 30/06/2014</b>	24 274 191,13 €
<b>Regulatory Capital 30/06/2014</b>	2 495 082,00 €

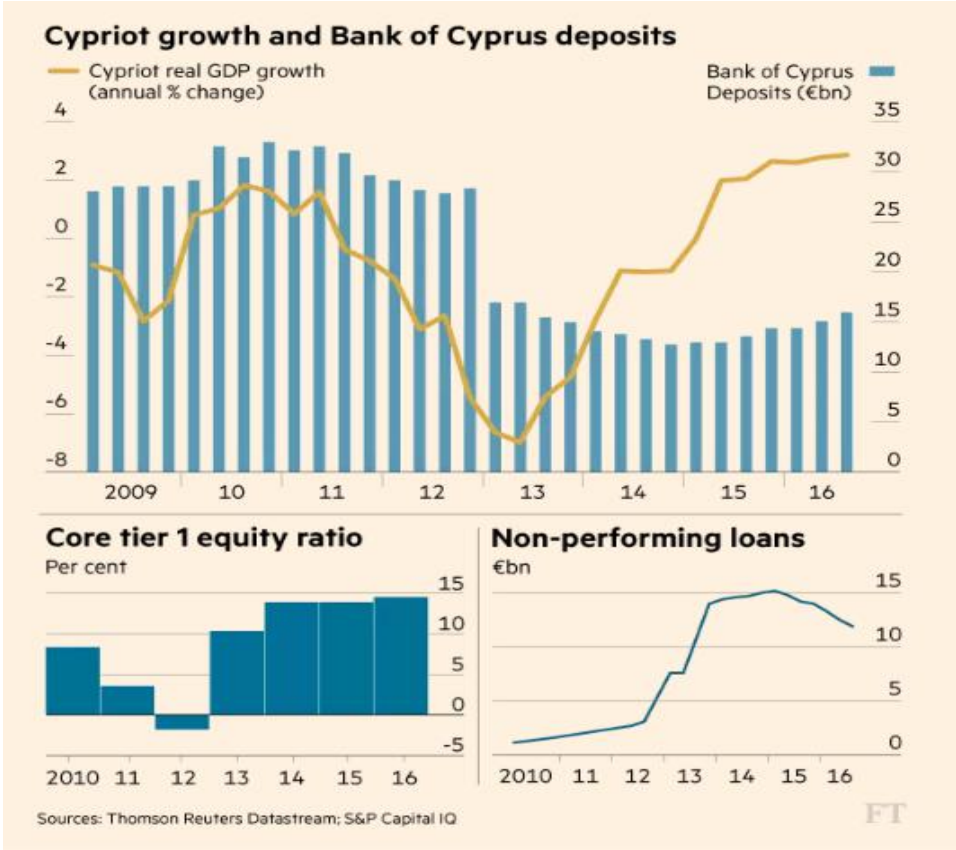
*Values in thousand*

## Exhibit 7 (TN7) – Summary of Value Creation

Table 5 - Metrics to compute value creation

Metrics	Option 1 - Creation Bad Bank (€)	Option 2 - Creation Internal Department (€)	
Tax Deductions	0,00	41 469 120,00	=12,6%*(329120)*1000
Tax Shield	19 964 720,16	30 249 576,00	
Credit Rating Debt	4 183 201,49	0,00	=+(371000+1799977000)*(1+5%)- (371000+1799977000)*(1+4,5%)
New Capital increase losses	N/A	-11 375 000,91	
<b>TOTAL</b>	<b>24 147 921,65</b>	<b>60 343 695,09</b>	=-(2,97-0,24)*4166667
<b>Capital Ratio</b>	<b>17,27%</b>	<b>10,28%</b>	

Exhibit 8 (TN8) – Bank of Cyprus up to date data



Source: Financial Times